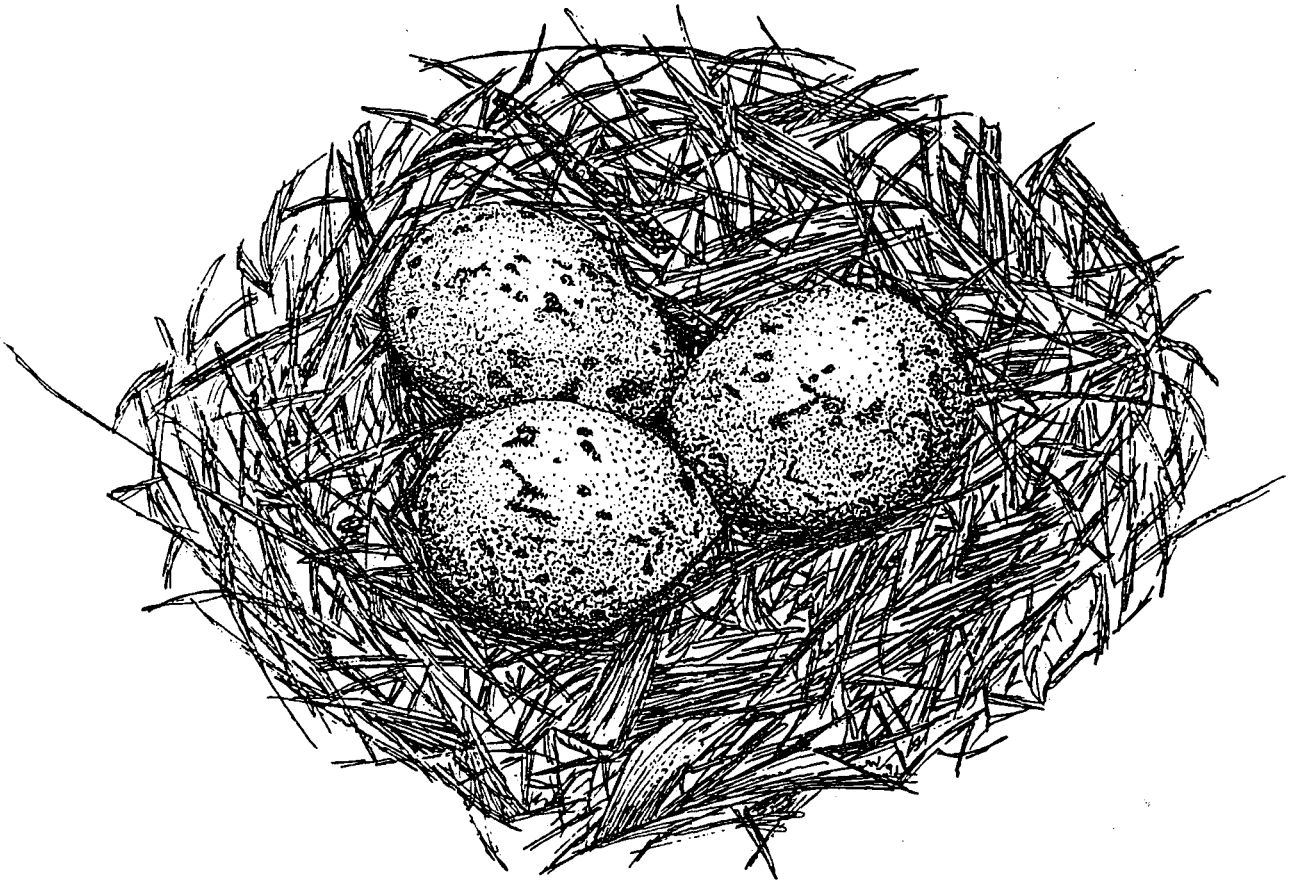
AN ATLAS OF CONTAMINANTS IN EGGS OF FISH-EATING COLONIAL BIRDS OF THE GREAT LAKES (1989-1992)

Technical Report Series No. 194



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EXECUTIVE SUMMARY

During 1989-1992, Canadian Wildlife Service (Ontario) collected a total of 1495 eggs from fish-eating colonial birds from 50 colonies throughout the Great Lakes to measure the levels of 86 chlorinated hydrocarbon compounds, and the lipid concentrations present. These data were generated as part of a monitoring program started in 1970 to understand the temporal and spatial trends in environmental contaminant levels in biota of the Great Lakes. During 1989-1992, the levels of chlorinated hydrocarbons in colonial waterbird eggs have remained relatively stable within colonies across the Great Lakes. This is consistent with trends occurring in the mid-1980s in fish-eating colonial bird eggs from the Great Lakes as reported in *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1970-1988) Volume I, Accounts by Species* and *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1970-1988) Volume II, Accounts by Chemical* (Bishop *et al.*, 1992a; 1992b).

The data from 1989-92 are summarized in two volumes. Volume I contains contaminant data summarized by location. Non-coplanar PCB congener levels, patterns and interpretation of these patterns are also included in Volume I for Herring Gull eggs from 14 annual monitoring colonies. Volume II contains contaminant data summarized by compound analyzed. Both volumes contain sample locations and number of samples coloected for each species each year, and pooled values or means and standard deviations for organochlorine pesticide, polychlorinated biphenyls, dioxin and furan concentrations.

SOMMAIRE

Entre 1989 et 1992, le Service canadien de la faune (Ontario) a recueilli un total de 1 495 oeufs d'oiseaux piscivores provenant de 50 colonies réparties dans la région des Grands Lacs. L'objectif était de mesurer les teneurs de 86 hydrocarbures chlorés et les concentrations de lipides. La collecte des données s'inscrivait dans un programme de surveillance qui a été institué en 1970 dans le but de comprendre les tendances géographiques et temporelles des concentrations de contaminants dans la biote des Grands Lacs. Pendant la période de 1989 à 1992, les concentrations d'hydrocarbures chlorés présentes dans les oeufs d'oiseaux aquatiques sont demeurées relativement stables dans les colonies des Grands Lacs. Ce résultat confirme la tendance qui a été observée au milieu des années 1980 dans les oeufs d'oiseaux piscivores des Grands Lacs et qui est décrite dans les publications *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1970-1988) Volume I, Accounts by Species* et *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1970-1988) Volume II, Accounts by Chemical* (Bishop et al., 1992a; 1992b).

Les données de 1989 à 1992 sont résumées dans les deux volumes ci-dessus. Le volume I énumère les contaminants selon le lieu d'échantillonnage. Le volume I aborde également les concentrations de congénères de BPC non coplanaires, les tendances générales et l'interprétation de ces tendances pour les oeufs de goéland argenté provenant de 14 colonies annuelles sous surveillance. Le volume II répartit les contaminants selon les composés analysés. Les deux volumes décrivent les lieux d'échantillonnage, le nombre d'échantillons recueillis annuellement pour chaque espèce, les valeurs des échantillons totalisés ou les moyennes, ainsi que l'écart type des échantillons individuels analysés pour la détection de pesticide organochloré, de biphényles polychlorés, de dioxine et de furanne.

ACKNOWLEDGEMENTS

We would like to acknowledge the following people who have enthusiastically and diligently contributed to the study of contaminants in colonial waterbirds during 1989-1992 by collecting eggs or otherwise contributing to this project: Larry Benner, Hans Blokpoel, Sara Card, Rosalind Chaundy, Tom Clark, Neil Burgess, Mark Deakos, Peter Ewins, Ray Faber, Glen Fox, John Haig, Premek Hamr, Craig Hebert, Phil Holder, Alvaro Jaramillo, Michael Kasserra, Margie Koster, Nadine Litwin, Glen Lopinski, Jim Ludwig, Brian McHattie, Martin McNicholl, John Mitchell, Ralph Morris, Jan Neuman, Martin Parker, Jeff Robinson, Mark Ruthven, Laird Shutt, Murray Sindall and Gaston Tessier.

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Useful comments on draft manuscript(s) of the atlas were provided by Donna Stewart. Kate Seneco, Graham van der Slagt and Jan Neuman assisted in the proof reading of the data.

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Many people have contributed to this work over the past twenty-two years. We hope that we have not forgotten anyone, but undoubtedly some volunteers who came out for a day or for a few hours to help may have been omitted; our apologies to those people. Here's to flat water forever!

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INTRODUCTION

During 1989-1992, Canadian Wildlife Service (Ontario) collected a total of 1495 eggs from fish-eating colonial waterbirds from 50 colonies throughout the Great Lakes to measure the levels of chlorinated hydrocarbons, and lipid concentrations present. These data were generated as part of a monitoring program started in 1970 to understand the temporal and spatial trends in environmental contaminant levels in biota of the Great Lakes. During 1989-1992, the levels of chlorinated hydrocarbons in colonial waterbird eggs have remained relatively stable within colonies across the Great Lakes. This is consistent with trends occurring in the mid-1980s in fish-eating colonial bird eggs from the Great Lakes (Bishop *et al.*, 1992a, 1992b).

The present documents, *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1989-1992) Volume I, Accounts by Species* and *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1989-1992) Volume II, Accounts by Chemical*, are meant to continue two earlier volumes: *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1970-1988) Volume I, Accounts by Species* and *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1970-1988) Volume II, Accounts by Chemical*. To facilitate access to the data, we have organized the text and tables in these reports similarly to the earlier reports. These reports contain the means and standard deviations or pooled analysis values for organochlorine pesticide, polychlorinated biphenyls and polychlorinated dioxins and furan concentrations as well as PCB congener patterns in Herring Gulls (*Larus argentatus*) at 14 colonies.

Data from specific sampling locations or for specific compounds can be retrieved in a stepwise manner from this atlas and instructions for data retrieval are detailed below. We have summarized the data by the sample sizes of egg collections (Volumes I & II, Section 1, Table 1-10), by location sampled (Volume I, Section 2, Table 11), and by chemical (Volume II, Section 2, Table 11). The means and standard deviations are presented for PCB congeners contributing to the sum of PCBs for Herring Gulls (Volume I, Section 3, Table 12). We have also provided maps (Volumes I & II, Section 1, Figures 1-10) showing the locations of sample collections and bar graphs (Volume II, Section 3, Figures 11-24) of mean percent contribution of 40-42 individual congeners to the total PCB concentrations in Herring Gull eggs from 14 annual monitoring colonies.

INSTRUCTIONS FOR USERS OF THIS ATLAS

The atlas is designed to be used in a stepwise manner. The quickest method of finding the data available for a specific location, species or chemical is described below.

1) The first step is designed to alert the user to the scope of the database in this document. Tables 1-10 are summaries of species sampled, compounds analyzed and number of eggs analyzed in each sample year (1989-1992) from colonies in the Great Lakes. The accompanying maps (Figures 1-10) illustrate the locations of Great Lakes colonies of fish-eating birds from which eggs were collected for contaminant analysis. The colony names are numbered on the maps and these correspond to numbers on the accompanying tables. These tables are included in both volumes.

   If, for example, you were interested in types of contaminants and the levels found in eggs of fish-eating birds in the Kingston area, you would refer to Figure 2 (page 14), which illustrates the colonies sampled in eastern Lake Ontario. The colonies: Snake Island, West Brothers Island, Pigeon Island, and Little Galloo Island are located near Kingston. You would then refer to Table 2, which lists the species whose eggs were sampled at each of these colonies, the years of sampling and the contaminants measured in the eggs. This simply and quickly informs you of the amount of data available for species in every area of the Great Lakes.

2) The second step is to locate the mean, standard deviation and sample size for each contaminant measurement in the eggs of every species that has been sampled in the location of interest. Section 2 in both volumes contain summaries of the same data, but present the data in two different ways. In Volume I (Section 2, Table 11), the data are presented summarized by sampling location, and in Volume II (Section 2, Table 11), by types of chemicals measured in the eggs. Volume I, Section 3 (Table 12) provides the breakdown of the sum of PCBs for Herring Gulls at Great Lakes monitoring colonies.

   If, for example, you were interested in data concerning species on Snake Island in Lake Ontario, refer to the data summary by sample location (Volume I, Section 2). If you are interested in Dieldrin levels throughout the Great Lakes or in the Kingston area, reference to the data summary by chemical (Volume II, Table 11) would be most suitable. If you are interested in individual non-coplanar PCB congener levels in Herring Gulls throughout the Great Lakes or in the Kingston area, reference to the data summary by PCB congener (Volume I, Table 12) would be most suitable.

NOTE:

It is important that the summary of methodologies and statistical notes pertaining to the current data (page 7) be examined by all readers to facilitate proper interpretation of the data.

The locations, chemicals analyzed, and species are listed in the following order in all indices and tables:

1. The lakes and colony locations are listed, generally, in east to west order.
2. The contaminants measured are listed , generally, in alphabetical order. A list of the order of the contaminants measured and the abbreviations used on the tables begins on page 4.
3. The species sampled are listed in the following order:
   Herring Gull (*Larus argentatus*)
   Double-crested Cormorant (*Phalacrcorax auritus*)
   Caspian Tern (*Sterna caspia*)
   Common Tern (*Sterna hirundo*)
   Black-crowned Night-Heron (*Nycticorax nycticorax*)
   Ring-billed Gull (*Larus delawarensis*)
   Forster's Tern (*Sterna forsteri*)
   Great Egret (*Casmerodius albus*)

   This list is in sequential order which reflects the species for which we have the most (Herring Gull) to least data.

OUTLINE OF DOCUMENT - VOLUME I

Section 1 - Data Summary by Sample Size

For each area, a map (Figures 1-10) and a corresponding table (Tables 1-10) present the species sampled, and the compounds and sample size analyzed in samples from each site.

Section 2 - Data Summary by Location Sampled

The index (page 34) lists the pages in Table 11 in which all contaminant data can be found concerning each species at each colony. Following the index, Table 11 presents contaminant data for eggs of fish-eating birds summarized by lakes, colonies and years sampled.

Section 3 - Non-Coplanar PCB Congener patterns in Herring Gull Eggs

In Figures 11-24, a graphic representation of the mean (+/- standard deviation) percentage of each polychlorinated biphenyl congener measured routinely in Herring Gull eggs during 1989-1992 from 14 annual monitoring colonies is provided. The index (page 275) lists the pages in Table 12 on which PCB congener data can

be found for each monitoring colony. Following the index, Table 12 presents non-coplanar PCB congener data (with means and standard deviations for individual samples) summarized by colony and years sampled.

OUTLINE OF DOCUMENT - VOLUME II

Section 1 - Data Summary by Sample Size

For each area, a map (Figures 1-10) and a corresponding table (Tables 1-10) present the species sampled, and the compounds and sample size analyzed in samples from each site.

Section 2 - Data Summary by Compound

The index (page 34) lists the pages in Table 11 on which data for each compound can be found for the colonies sampled in each lake. Table 11 presents contaminant data for eggs of fish-eating birds summarized by species, lakes, colonies and years sampled.

COMPOUNDS ANALYZED IN EGGS OF FISH-EATING BIRDS OF THE GREAT LAKES

The following compounds are listed in alphabetical order except for "percent lipid in egg". The underlined sections of the chemical names are the words which were used to place the chemical in its alphabetical position in the list. Chemical congeners are listed in order of increasing chlorination. The order of names in this list is used consistently throughout the tables in this document. Abbreviations correspond to those on Table 1 through Table 10. Chemical Abstract System (CAS) numbers have been included, where they were available. PCB congener numbering follows Ballschmiter and Zell (1980).

Compounds reported for all species at all colonies in Table 11 (Vols. I & II)

CAS #	COMPOUNDS	ABBREVIATION (used in tables 1-10)
	Percent lipid in egg	% Lip
5103-71-9	Alpha(cis)-chlordane	a-CHL
5103-74-2	Gamma(trans)-chlordane	g-CHL
7304-13-8	Oxy-chlordane	o-CHL
634-66-2	1,2,3,4-chlorobenzene	1234-CB
	1,2,3,5/1,2,4,5-chlorobenzene	1235/1245-CB
608-93-5	Pentachlorobenzene	PeCB
118-74-1	Hexachlorobenzene	HCB
72-54-8	pp'-DDD	DDD
72-55-9	pp'-DDE	DDE
50-29-3	pp'-DDT	DDT

Compounds reported for all species at all colonies in Table 11 (Vols. I & II)

CAS #	COMPOUNDS	ABBREVIATION (used in tables 1-10)
60-57-1	Dieldrin	DIEL
1024-57-3	Heptachlor epoxide	HEP EPX
39-84-6	Alpha-hexachlorocyclohexane	a-HCH
39-85-7	Beta-hexachlorocyclohexane	b-HCH
58-89-8	Gamma-hexachlorocyclohexane	g-HCH
2385-85-5	Mirex	MIR
39801-14-4	Photomirex	P-MIR
5103-73-1	Cis-nonachlor	c-NON
39765-80-5	Trans-nonachlor	t-NON
	Octachlorostyrene	OCS
11097-69-1	PCB:1260	PCB 1260
11096-82-5	PCB:1254-1260	PCB 1254:1260
7782-49-2	Total PCB congeners (non-coplanar)	SUM PCB
Coplanar PCB Congeners		
38444-90-5	PCB #37 3,4,4′-trichlorobiphenyl	COP PCB
32598-13-3	PCB #77 3,3′,4,4′-tetrachlorobiphenyl	COP PCB
57465-28-8	PCB #126 3,3′,4,4′,5-pentachlorobiphenyl	COP PCB
32774-16-6	PCB #169 3,3′,4,4′,5,5′-hexachlorobiphenyl	COP PCB
Dioxins		
1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	DIOXIN
40321-76-4	1,2,3,7,8-pentachlorodibenzo-p-dioxin	DIOXIN
	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	DIOXIN
39227-28-6	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	DIOXIN
19408-74-3	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	DIOXIN
35822-46-9	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	DIOXIN
3268-87-7	Octachlorodibenzo-p-dioxin	DIOXIN
Furans		
51207-31-9	2,3,7,8-tetrachlorodibenzofuran	FURAN
	1,2,3,7,8/1,2,3,4,8-pentachlorodibenzofuran	FURAN
	1,2,4,8,9/2,3,4,6,7-pentachlorodibenzofuran	FURAN
57117-31-4	2,3,4,7,8-pentachlorodibenzofuran	FURAN
	1,2,3,4,6,9/1,2,3,6,8,9-hexachlorodibenzofuran	FURAN
	1,2,3,4,7,8-hexachlorodibenzofuran	FURAN
55684-94-1	1,2,3,6,7,8-hexachlorodibenzofuran	FURAN
	1,2,3,7,8,9-hexachlorodibenzofuran	FURAN
	1,2,3,6,8,9-hexachlorodibenzofuran	FURAN
	2,3,4,6,7,8-hexachlorodibenzofuran	FURAN
	1,2,3,4,6,7,8-heptachlorodibenzofuran	FURAN
	1,2,3,4,7,8,9-heptachlorodibenzofuran	FURAN
	Octachlorodibenzofuran	FURAN

Compounds reported for Herring Gulls at annual monitoring colonies in Table 12 (Volume I)

CAS #	COMPOUNDS		ABBREVIATION
Non-coplanar PCB congeners			(not applicable)
16606-02-3	PCB #28	2,4,4′-trichlorobiphenyl	
7012-37-5	PCB #31	2,4′,5-trichlorobiphenyl	
36559-22-5	PCB #42	2,2′,3,4′-tetrachlorobiphenyl	
41464-39-5	PCB #44	2,2′,3,5′-tetrachlorobiphenyl	
41464-40-8	PCB #49	2,2′,4,5′-tetrachlorobiphenyl	
35693-99-3	PCB #52	2,2′,5,5′-tetrachlorobiphenyl	
33025-41-1	PCB #60	2,3,4,4′-tetrachlorobiphenyl	
52663-58-8	PCB #64	2,3,4′,6-tetrachlorobiphenyl	
32598-10-0	PCB #66	2,3′,4,4′-tetrachlorobiphenyl	
32598-11-	PCB #70	2,3′,4′,5-tetrachlorobiphenyl	
32690-93-0	PCB #74	2,4,4′,5-tetrachlorobiphenyl	
38380-02-8	PCB #87	2,2′,3,4,5′-pentachlorobiphenyl	
41464-51-1	PCB #97	2,2′,3′,4,5-pentachlorobiphenyl	
38380-01-7	PCB #99	2,2′,4,4′,5-pentachlorobiphenyl	
37680-73-2	PCB #101	2,2′,4,5,5′-pentachlorobiphenyl	
32598-14-4	PCB #105	2,3,3′,4,4′-pentachlorobiphenyl	
38380-03-9	PCB #110	2,3,3′,4′,6-pentachlorobiphenyl	
3108-00-6	PCB #118	2,3′,4,4′,5-pentachlorobiphenyl	
38380-07-3	PCB #128	2,2′,3,3′,4,4′-hexachlorobiphenyl	
55215-18-4	PCB #129	2,2′,3,3′,4,5-hexachlorobiphenyl	
35694-06-5	PCB #137	2,2′,3,4,4′,5-hexachlorobiphenyl	
35065-28-2	PCB #138	2,2′,3,4,4′,5′-hexachlorobiphenyl	
52712-04-6	PCB #141	2,2′,3,4,5,5′-hexachlorobiphenyl	
51908-16-8	PCB #146	2,2′,3,4′,5,5′-hexachlorobiphenyl	
38380-04-0	PCB #149	2,2′,3,4′,5′,6-hexachlorobiphenyl	
52663-63-5	PCB #151	2,2′,3,5,5′,6-hexachlorobiphenyl	
35065-27-1	PCB #153	2,2′,4,4′,5,5′-hexachlorobiphenyl	
74472-42-7	PCB #158	2,3,3′,4,4′,6-hexachlorobiphenyl	
35065-30-6	PCB #170	2,2′,3,3′,4,4′,5-heptachlorobiphenyl	
52663-70-4	PCB #171	2,2′,3,3′,4,4′,6-heptachlorobiphenyl	
52663-74-8	PCB #172	2,2′,3,3′,4,5,5′-heptachlorobiphenyl	
38411-25-5	PCB #174	2,2′,3,3′,4,5,6′-heptachlorobiphenyl	
35065-29-3	PCB #180	2,2′,3,4,4′,5,5′-heptachlorobiphenyl	
60145-23-5	PCB #182	2,2′,3,4,4′,5,6′-heptachlorobiphenyl	
52663-69-1	PCB #183	2,2′,3,4,4′,5′,6-heptachlorobiphenyl	
52712-05-7	PCB #185	2,2′,3,4,5,5′,6-heptachlorobiphenyl	
35694-08-7	PCB #194	2,2′,3,3′,4,4′,5,5′-octachlorobiphenyl	
52663-78-2	PCB #195	2,2′,3,3′,4,4′,5,6-octachlorobiphenyl	
40186-71-8	PCB #200	2,2′,3,3′,4,5′,6,6′-octachlorobiphenyl	
52663-75-9	PCB #201	2,2′,3,3′,4,5,5′,6′-octachlorobiphenyl	
52663-76-0	PCB #203	2,2′,3,4,4′,5,5′,6-octachlorobiphenyl	
40186-72-9	PCB #206	2,2′,3,3′,4,4′,5,5′,6-nonachlorobiphenyl	

METHODOLOGICAL AND STATISTICAL NOTES SPECIFIC TO TABLES 11-12 (VOLS I & II)

1. All analytical data have been calculated on a wet weight basis.

2. All means and standard deviation values are reported at four significant digits. Trailing zeros in these values are truncated.

3. Dioxin and Furan compounds are reported in pg/g (ppt). All other compounds are reported in μg/g (ppm).

4. All sample sizes reported as (N=1) represent a sample size of 10 eggs which were pooled and analyzed as a single sample.

5 Analytical results for DDD and DDT which are equal to or less than twice the detection limit (i.e. 0.01 μg/g) should not be considered absolute values. Rather they are indicative of very low levels which are approaching the detection limits of these chemicals.

6. The detection limits used in the analytical determination of PCBs, chlorinated benzenes, and organochlorine pesticides varied with the laboratory and methodology used. Changes in methodology principally affected determination and quantification of the PCBs. Detection limits have not been determined formally in every sample but, generally, the following can be used as a guide:

All chlorinated benzenes	0.001 μg/g
All organochlorine pesticides	0.005 μg/g
All polychlorinated biphenyls	0.01 μg/g

The minimum detection limits for dioxin and furan compounds from 1989 to 1991 exist within the ranges listed below. Fluctuations in detection limits occur subject to the cleanliness of the samples at the time of analysis and the condition of the ion source of the mass spectrometer at any given time. Trace amounts below the detection limit (signal/noise ratio between 2 and 3) are estimated and values are placed in brackets, ().

Tetrachlorodioxins/furans	1-2 pg/g
Pentachlorodioxins/furans	2-3 pg/g
Hexachlorodioxins/furans	3-4 pg/g
Heptachlorodioxins/furans	6-8 pg/g
Octachlorodioxins/furans	8-12 pg/g

Detection limits for dioxin and furan compounds for 1992 are within the ranges listed below. Compounds detected with incorrect ion ratio are reported and indicated by an "i".

Tetrachlorodioxins/furans	0.1-1.2 pg/g
Pentachlorodioxins/furans	0.3-4.4 pg/g
Hexachlorodioxins/furans	0.3-2.4 pg/g
Heptachlorodioxins/furans	0.6-4.9 pg/g
Octachlorodioxins/furans	0.5-4.3 pg/g

7. Sum of PCB congeners (ΣPCB) refers to the following congeners in 1989-90:

28, 31, 42, 44, 49, 52, 60, 64, 66, 70, 87, 97, 99, 101, 105, 110, 118, 128, 129, 137, 138, 141, 146, 151, 153, 158, 170, 171, 172, 174, 180, 182, 183, 185, 194, 195, 200, 201, 203, 206.

Congeners #74 and 149 were added to the analysis in 1991-92. Therefore, sum of PCB congeners are based on 40 congeners in 1989-90 and on 42 congeners in 1991-92.

8. All PCB data have been expressed as Aroclor 1254:1260 1:1 mixture or Aroclor 1260, as well as ΣPCB. These Aroclor values have been obtained using determination of PCB congeners #138 and 180.

However, the results of the Aroclor 1254:1260 1:1 mixture appear to be roughly twice that of results obtained by ΣPCB. Factors have been calculated to convert Aroclor 1254:1260 1:1 mixture results to ΣPCB results for Herring Gulls in the Great Lakes only (Turle *et al.*, 1991). Those factors are:

Lake Ontario	0.461
Lake Erie	0.444
Lake Huron	0.484
Lake Superior	0.450

9. Organochlorine pesticide and PCB analyses were performed by Henry Won at the CWS National Wildlife Research Centre (NWRC) (Peakall *et al.*, 1986).

Dioxins, furans and coplanar PCB congeners were analyzed by Mary Simon or John Moisey at NWRC (Norstrom *et al.*, 1986). These methods have been automated.

10. Chlordane isomers have been presented as alpha-chlordane, trans-chlordane, and oxy-chlordane. Alpha-chlordane is synonymous with cis-chlordane, and trans-chlordane is synonymous with gamma-chlordane.

SECTION 1 - DATA SUMMARIZED BY SAMPLE SIZE

Figures 1-10. Colonies of Fish-eating Birds from which Eggs Were Collected for Contaminant Analysis

Tables 1-10. Sample Size of Eggs Analyzed Each Year (1989-1992) Arranged by Collection Site, Species Sampled, and Compound Analyzed

LIST OF ABBREVIATIONS

Col No.	colony number
Spec.	species
Yr.	year of collection
HERG	Herring Gull
DCCO	Double-crested Cormorant
CATE	Caspian Tern
COTE	Common Tern
BCNH	Black-crowned Night-Heron
RBGU	Ring-billed Gull
FOTE	Forster's Tern
GREG	Great Egret

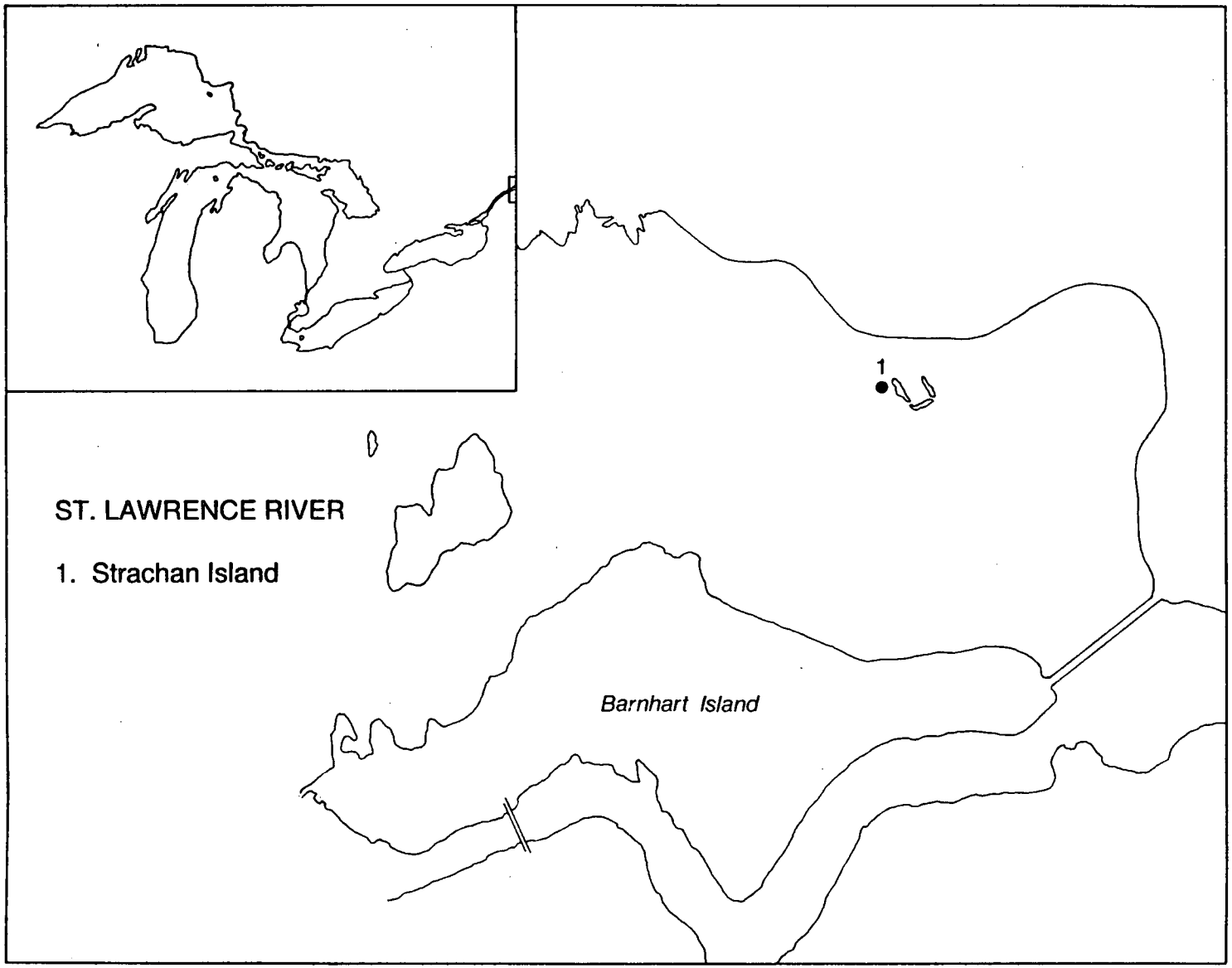

Figure 1. St. Lawrence colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 1. The sample size of eggs analyzed in each year (1989–1992) from the St.Lawrence River, arranged by collection site, species sampled, and compound analyzed.

Col No.	Spec	Yr.	% Lip	a-CHL	g-CHL	o-CHL	1234 CB	1235/ 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a-HCH	b-HCH	g-HCH	MIR	P-MIR	c-NON	t-NON	OCS	PCB 1260	PCB 1254: 1260	SUM PCB	COP PCB
1	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

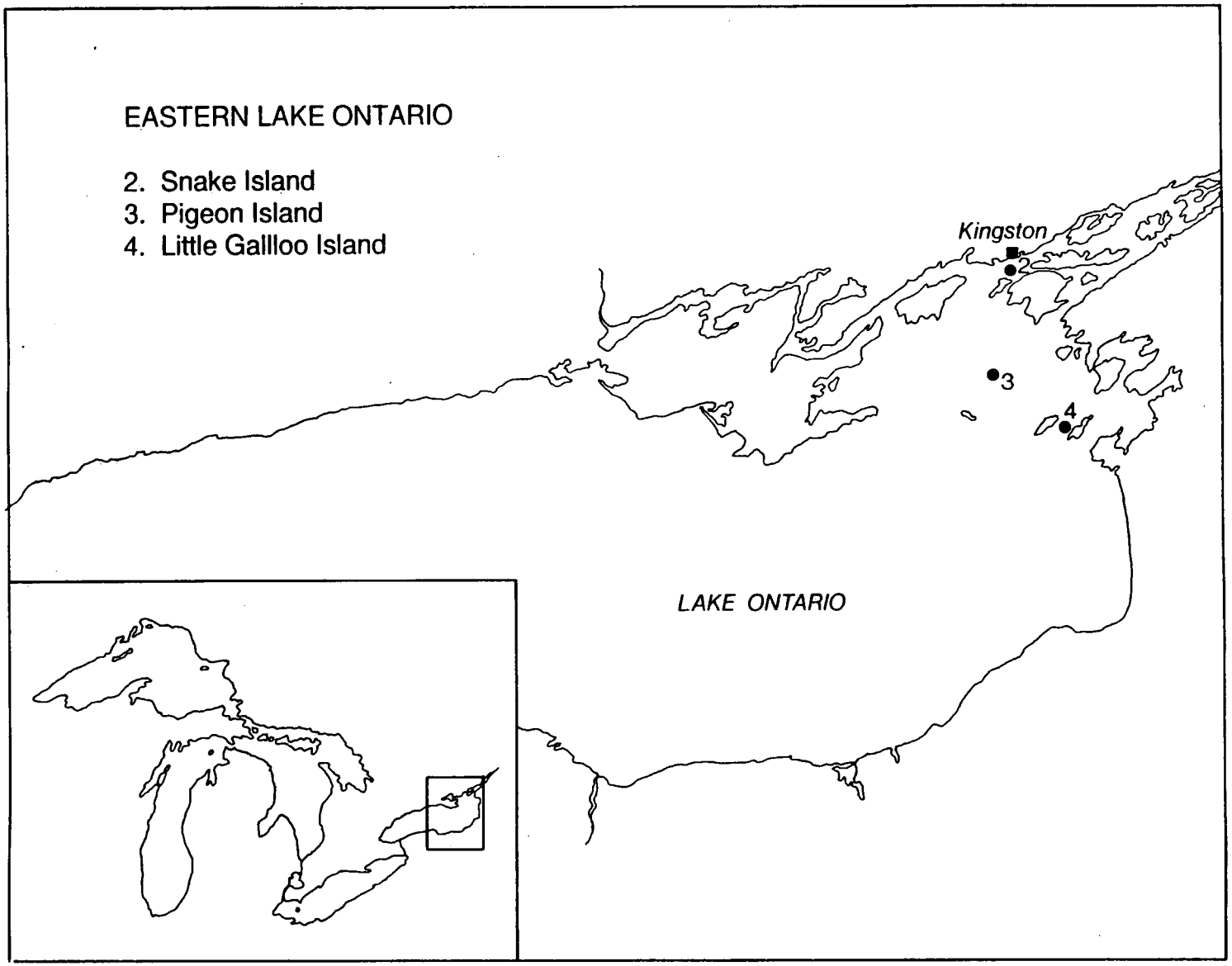

Figure 2. Eastern Lake Ontario colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 2. The sample size of eggs analyzed in each year (1989–1992) from eastern Lake Ontario, arranged by collection site, species sampled, and compound analyzed.

Col No.	Spec	Yr.	% Lip	a– CHL	g– CHL	o– CHL	1234 CB	1235/ 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a– HCH	b– HCH	g– HCH	MIR	P– MIR	c– NON	t– NON	OCS	PCB 1260	PCB 1254: 1260	SUM PCB	COP PCB
2	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	14	14	14	14	14	14	14	14	14	14	14	14	1	1	14	14	14	14	14	14	14	14	14	14	14	14	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	BCNH	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
3	DCCO	89	4	4	4	4	4	4	4	4	4	4	4	4	0	0	4	4	4	4	4	4	4	4	4	4	4	4	0
		90	3	3	3	3	3	3	3	3	3	3	3	3	1	1	3	3	3	3	3	3	3	3	3	3	3	3	0
		91	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	5
	CATE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
4	DCCO	90	3	3	3	3	3	3	3	3	3	3	3	3	0	0	3	3	3	3	3	3	3	3	3	3	3	3	0

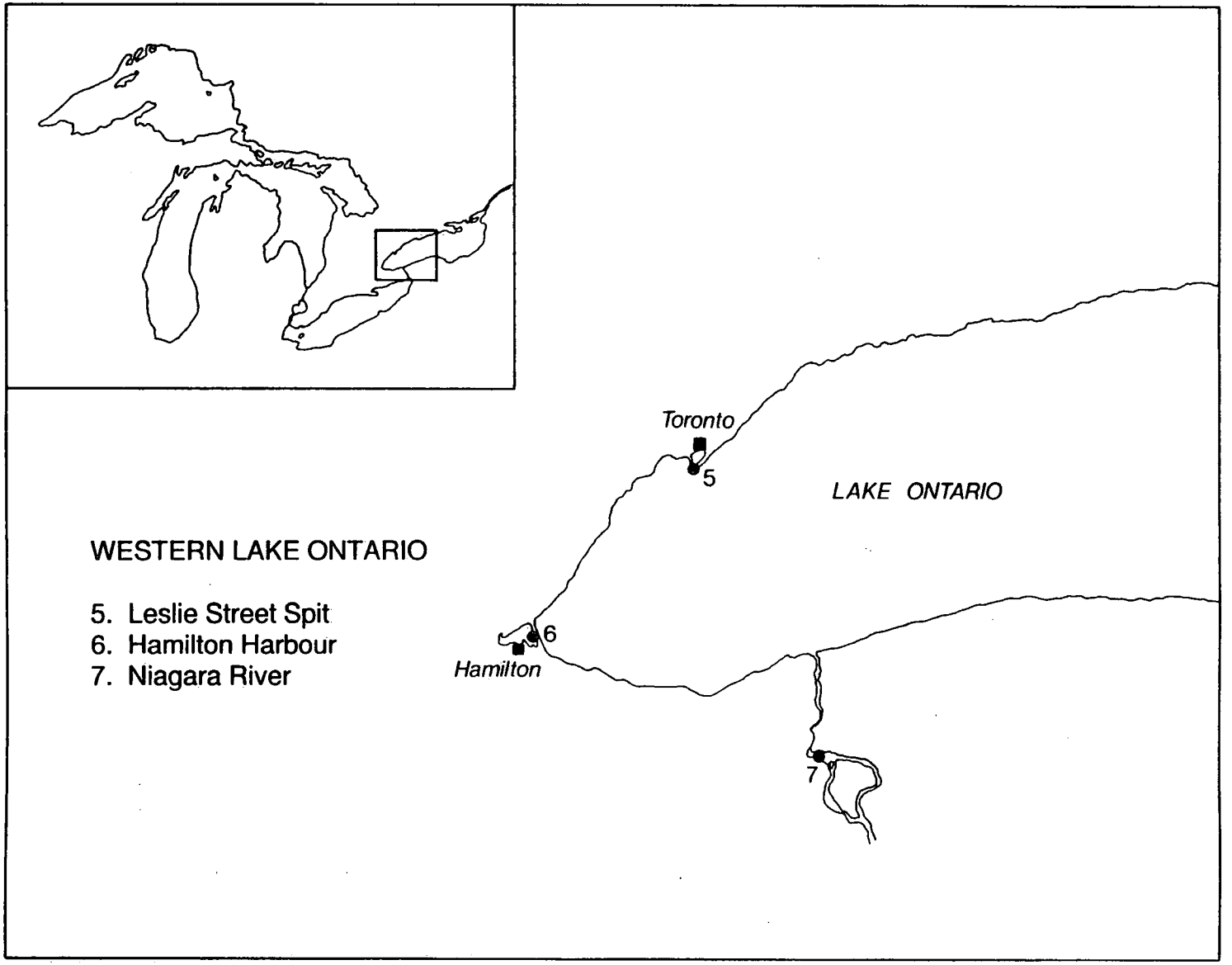

Figure 3. Western Lake Ontario and Niagara River colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 3. The sample size of eggs analyzed in each year (1989–1992) from western Lake Ontario and the Niagara River arranged by collection site, species sampled and compound analyzed.

Col No.	Spec	Yr.	% Lip	a– CHL	g– CHL	o– CHL	1234 CB	1235 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a– HCH	b– HCH	g– HCH	MIR	P– MIR	c– NON	t– NON	OCS	PCB 1260	PCB 1254: 1260	SUM PCB	COP PCB
5	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	14	14	14	14	14	14	14	14	14	14	14	14	1	1	14	14	14	14	14	14	14	14	14	14	14	14	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	BCNH	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
	RBO	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
6	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	DCCO	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	CATE	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
	COTE	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	2	2	2	2	2	2	2	2	2	2	2	2	0	0	2	2	2	2	2	2	2	2	2	2	2	2	0
	BCNH	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
7	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	BCNH	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0

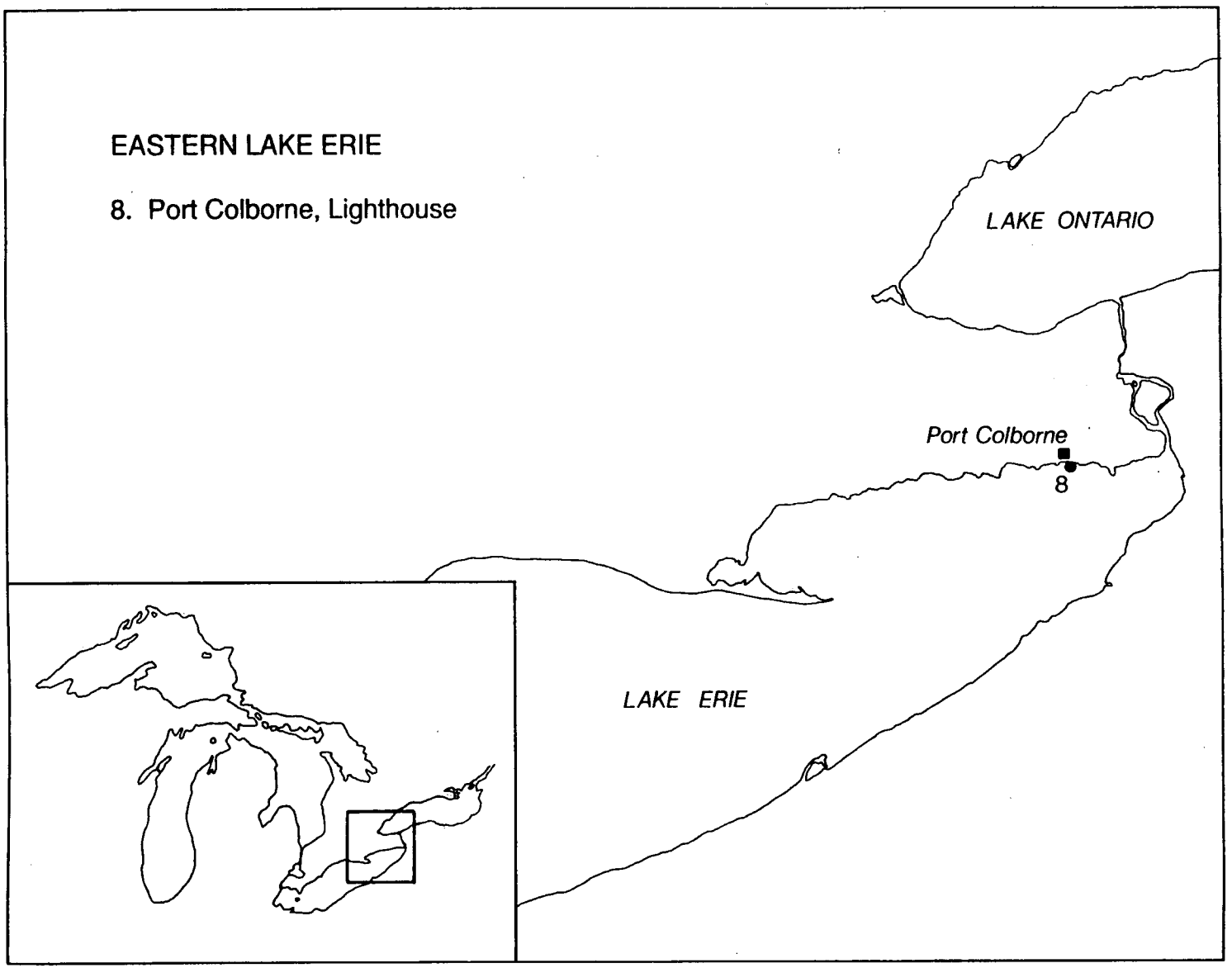

Figure 4. Eastern Lake Erie colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 4. The sample size of eggs analyzed in each year (1989–1992) from eastern Lake Erie arranged by collection site, species sampled and compound analyzed.

Cd No.	Spec	Yr.	% Lip	a- CHL	g- CHL	o- CHL	1234 CB	1235/ 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a- HCH	b- HCH	g- HCH	MIR	P- MIR	c- NON	t- NON	OCS	PCB 1260	PCB 1254/ 1260	SUM PCB	COP PCB
8	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	14	14	14	14	14	14	14	14	14	14	14	14	1	1	14	14	14	14	14	14	14	14	14	14	14	14	1

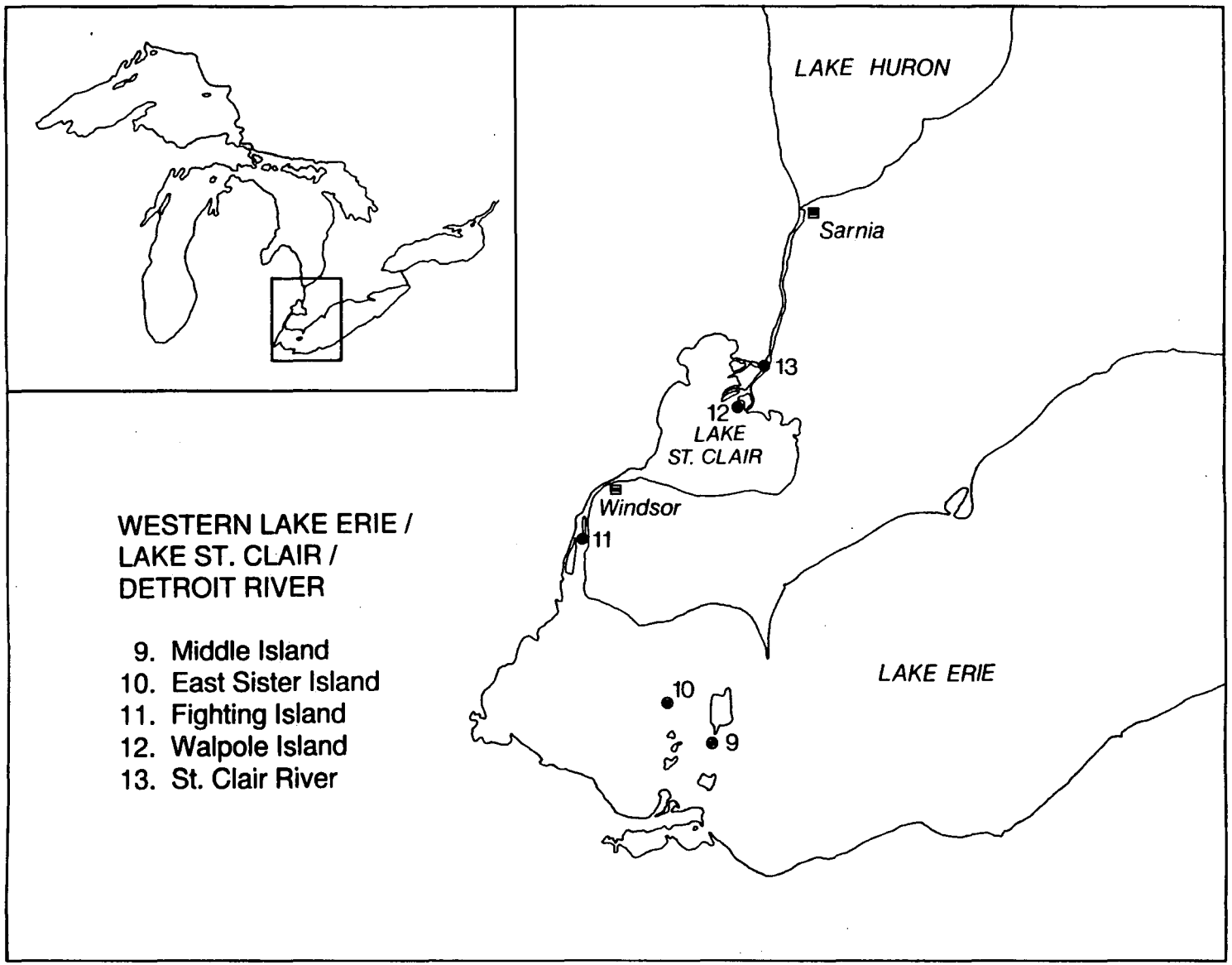

Figure 5. Western Lake Erie, Lake St. Clair and Detroit River colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 5. The sample size of eggs analyzed in each year (1989–1992) from western Lake Erie, Lake St.Clair and the Detroit River arranged by collection site, species sampled, and compound analyzed.

Col No.	Spec	Yr.	% Lip	a– CHL	g– CHL	o– CHL	1234 CB	1235/ 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a– HCH	b– HCH	g– HCH	MIR	P– MIR	c– NON	t– NON	OCS	PCB 1260	PCB 1254/ 1260	SUM PCB	COP PCB
9	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	14	14	14	14	14	14	14	14	14	14	14	14	1	1	14	14	14	14	14	14	14	14	14	14	14	14	1
10	DCCO	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	BCNH	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
	GREG	92	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
11	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	14	14	14	14	14	14	14	14	14	14	14	14	1	1	14	14	14	14	14	14	14	14	14	14	14	14	1
	COTE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
12	BCNH	92	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
	FOTE	92	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
13	HERG	91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

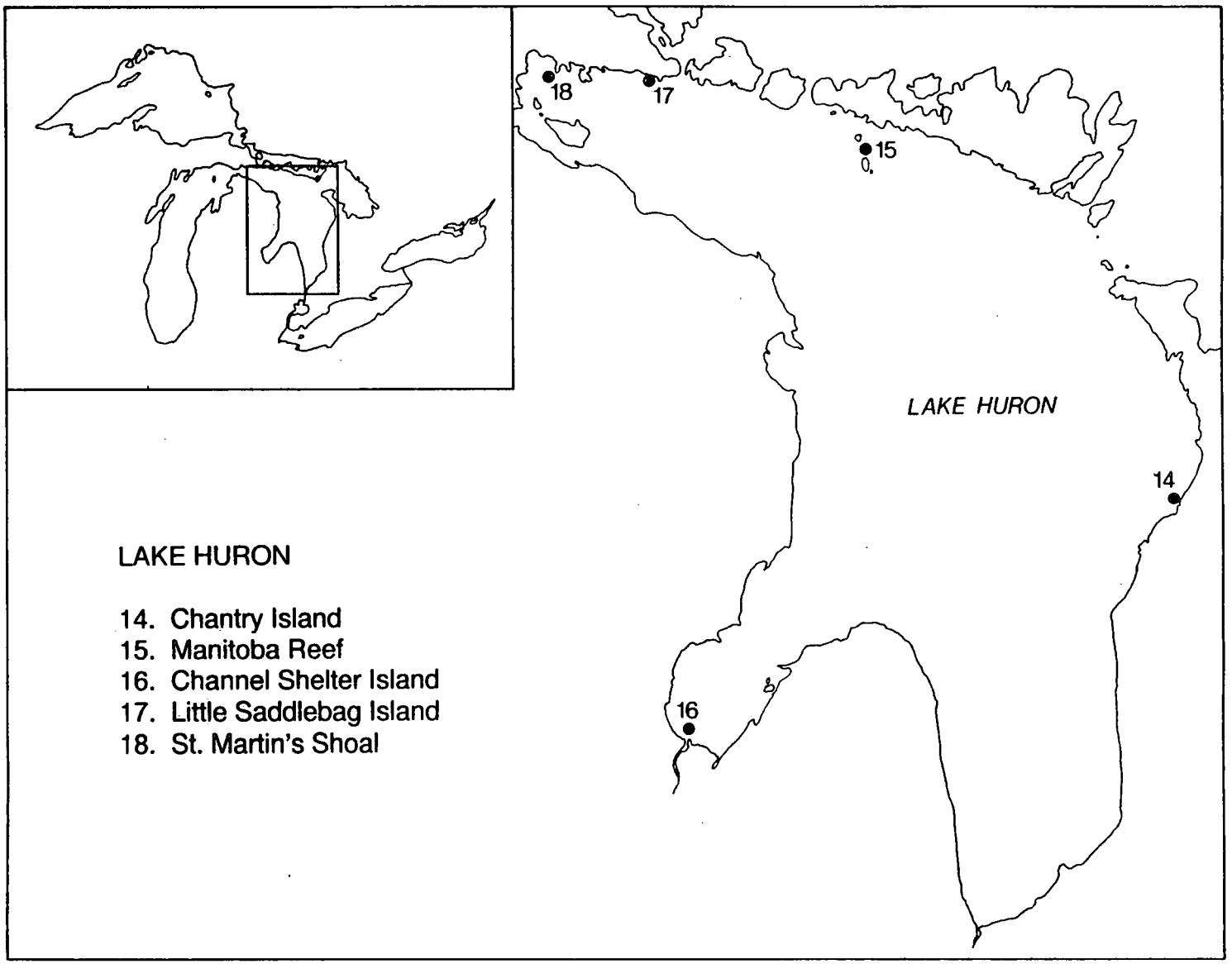

Figure 6. Lake Huron (main body) colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 6. The sample size of eggs analyzed in each year (1989–1992) from Lake Huron (main body) arranged by collection site, species sampled and compound analyzed.

Col No.	Spec	Yr.	% Lip	a– CHL	g– CHL	o– CHL	1234 CB	1235 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a– HCH	b– HCH	g– HCH	MIR	P– MIR	c– NON	t– NON	OCS	PCB 1260	PCB 1254: 1260	SUM PCB	COP PCB
14	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	BCNH	89	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
15	HERG	91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
16	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	CATE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
17	HERG	91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
18	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

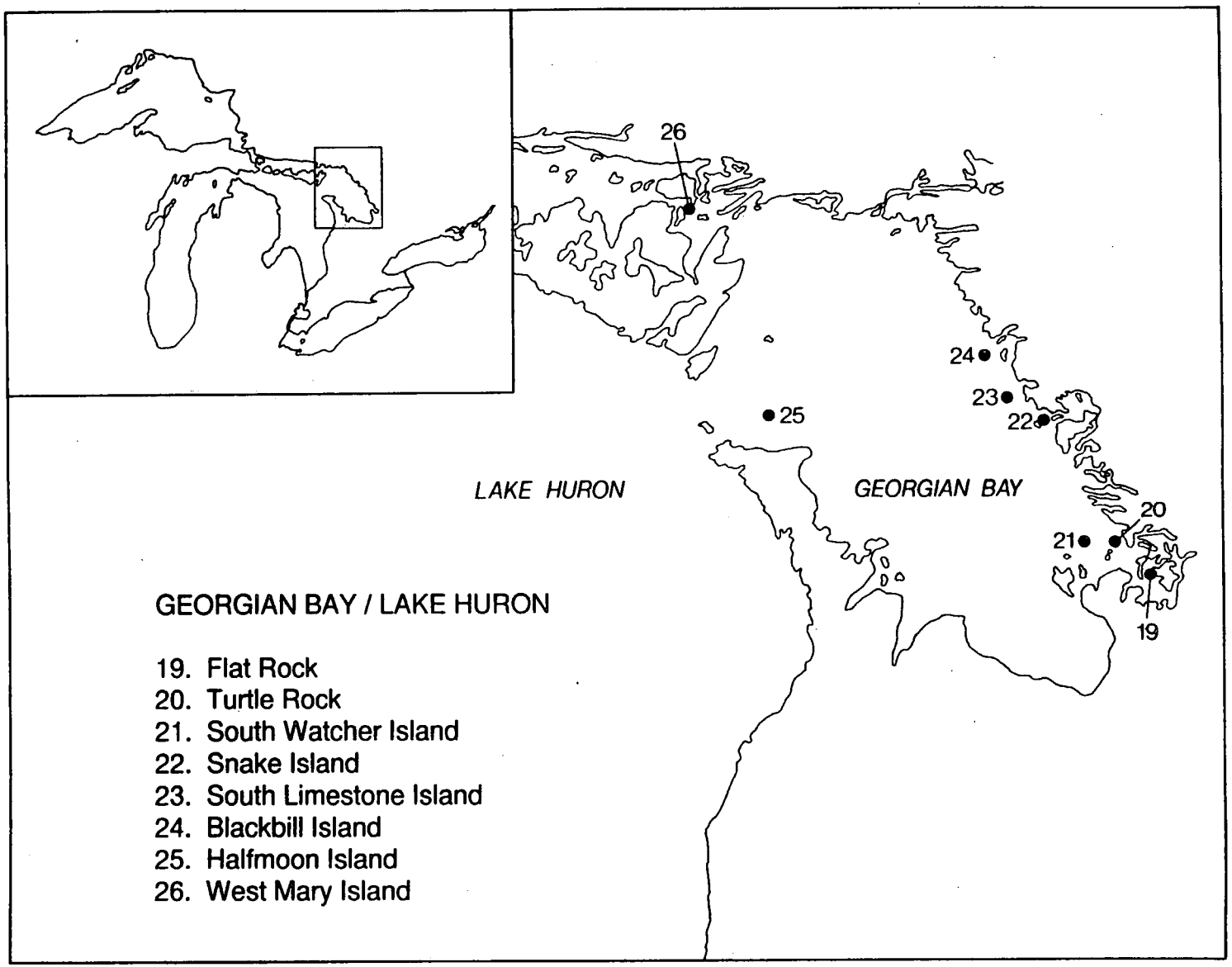

Figure 7. Georgian Bay (Lake Huron) colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 7. The sample size of eggs analyzed in each year (1989–1992) from Georgian Bay (Lake Huron) arranged by collection site, species sampled and compound analyzed.

Col No.	Spec	Yr.	% Lip	a-CHL	g-CHL	o-CHL	1234 CB	1235 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a-HCH	b-HCH	g-HCH	MIR	P-MIR	c-NON	t-NON	OCS	PCB 1260	PCB 1254 1260	SUM PCB	COP PCB
19	COTE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
20	HERG	91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
21	CATE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
22	HERG	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
23	CATE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
	COTE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
24	DCCO	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
25	CATE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
26	HERG	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

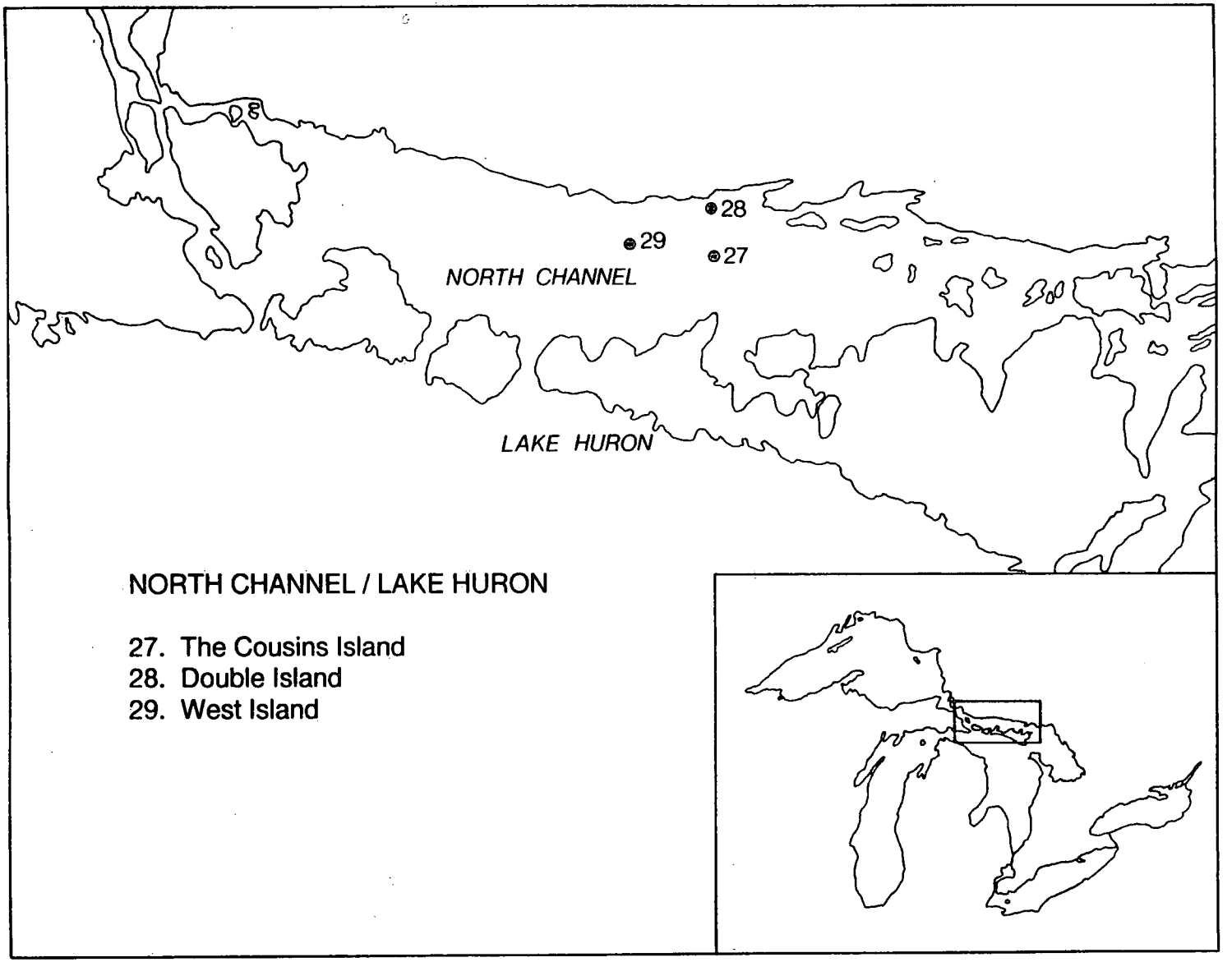

Figure 8. North Channel (Lake Huron) colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 8. The sample size of eggs analyzed in each year (1989–1992) from North Channel (Lake Huron) arranged by collection site, species sampled and compound analyzed.

Col No.	Spec	Yr.	% Lip	a- CHL	g- CHL	o- CHL	1234 CB	1235/ 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a- HCH	b- HCH	g- HCH	MIR	P- MIR	c- NON	t- NON	OCS	PCB 1260	PCB 1254: 1260	SUM PCB	COP PCB
27	CATE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
28	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29	DCCO	89	3	3	3	3	3	3	3	3	3	3	3	3	1	1	3	3	3	3	3	3	3	3	3	3	3	3	0

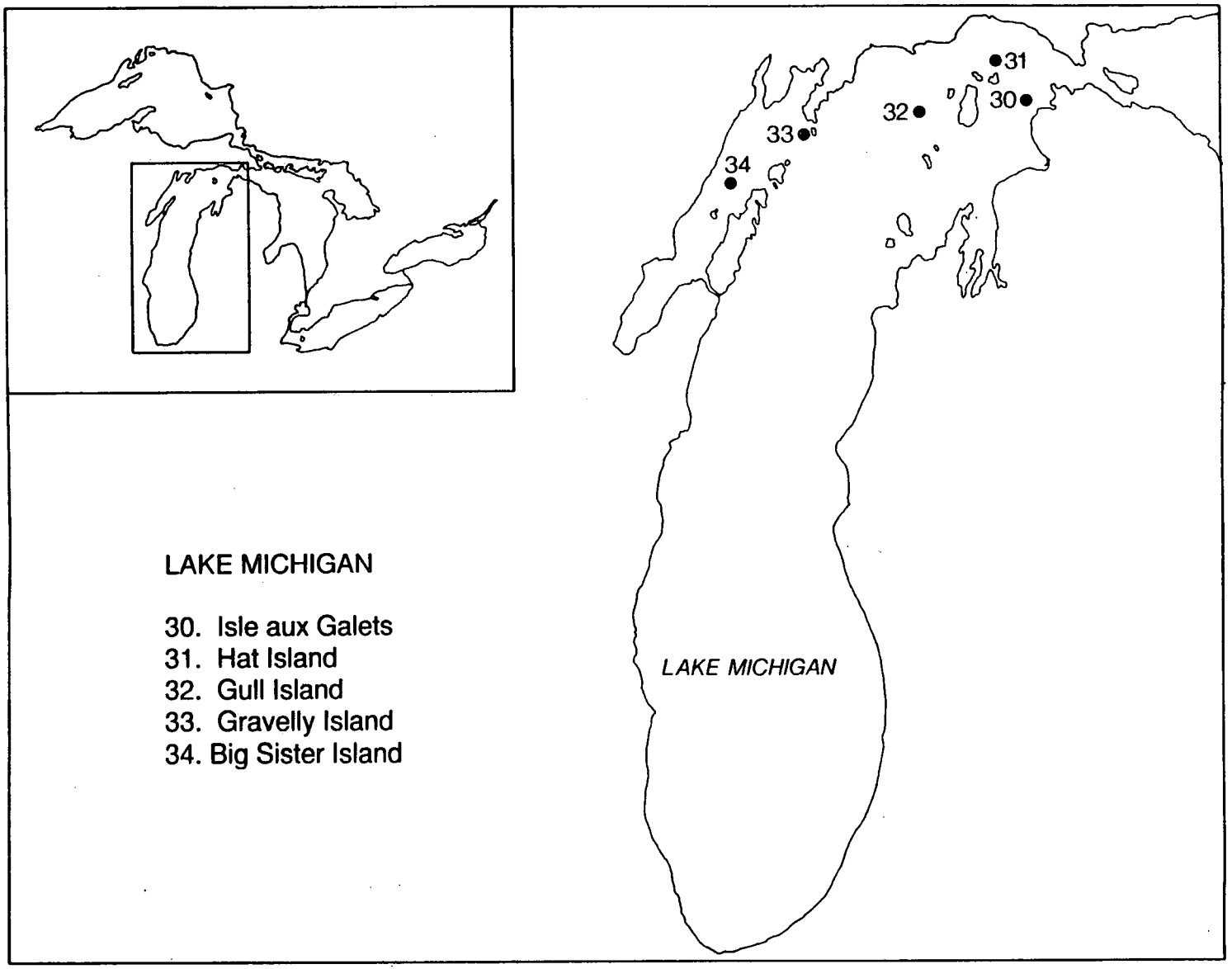

Figure 9. Lake Michigan colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 9. The sample size of eggs analyzed in each year (1989–1992) from Lake Michigan arranged by collection site, species sampled, and compound analyzed.

Col No.	Spec	Yr.	% Lip	a– CHL	g– CHL	o– CHL	1234 CB	1235 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a– HCH	b– HCH	g– HCH	MIR	P– MIR	c– NON	t– NON	OCS	PCB 1260	PCB 1254 1260	SUM PCB	COP PCB
30	CATE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
31	CATE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
32	HERG	89	14	14	14	14	14	14	14	14	14	14	14	14	1	1	14	14	14	14	14	14	14	14	14	14	14	14	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	CATE	91	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
34	HERG	89	14	14	14	14	14	14	14	14	14	14	14	14	1	1	14	14	14	14	14	14	14	14	14	14	14	14	0
		90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

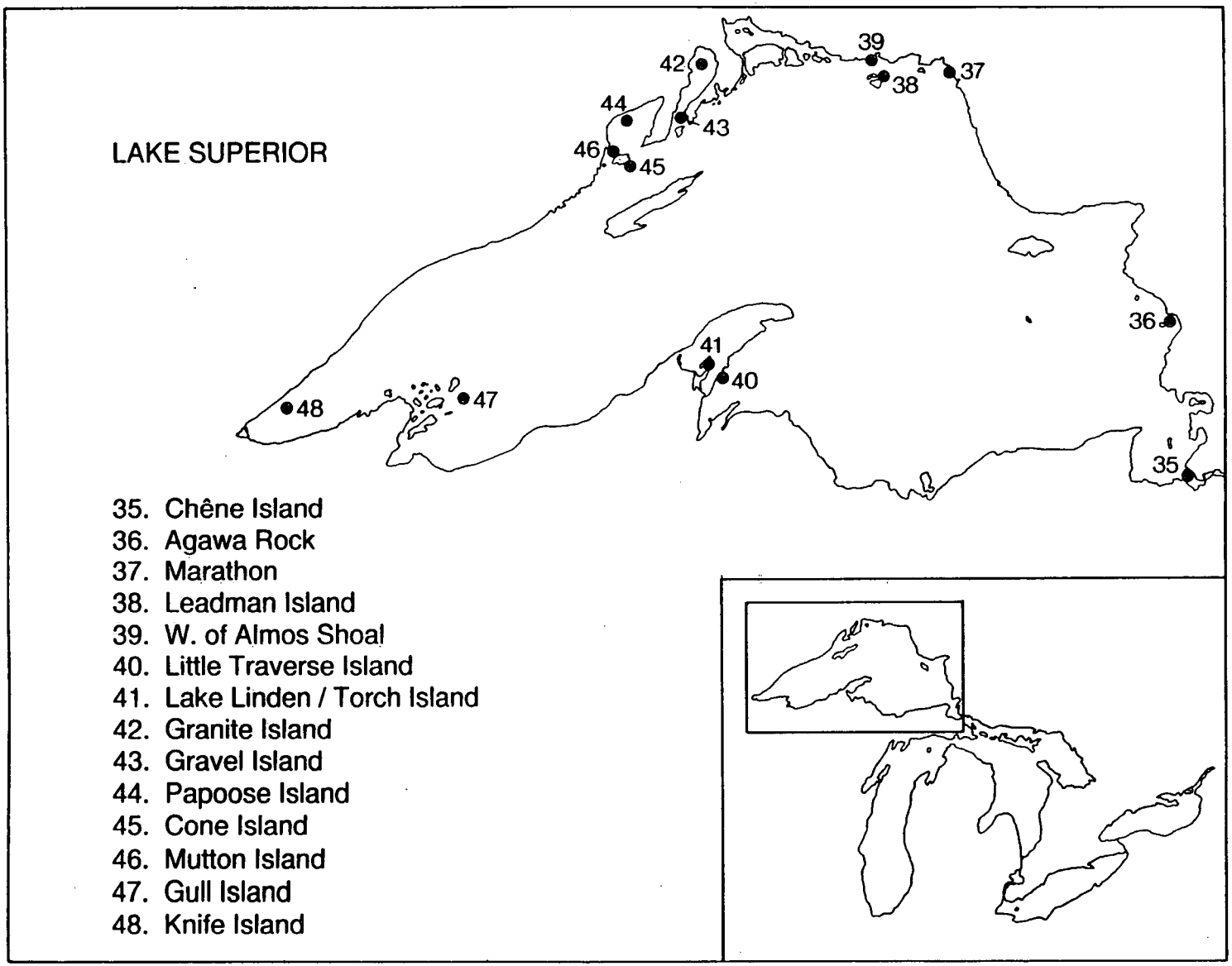

Figure 10. Lake Superior colonies of fish-eating birds from which eggs were collected for contaminant analysis.

Table 10. The sample size of eggs in each year (1989–1992) from Lake Superior arranged be collection site, species sampled and compound analyzed.

Cd No.	Spec	Yr.	% Lip	a– CHL	g– CHL	o– CHL	1234 CB	1239 1245 CB	PeCB	HCB	DDD	DDE	DDT	DIEL	DIOXIN	FURAN	HEP EPX	a– HCH	b– HCH	g– HCH	MIR	P– MIR	e– NON	t– NON	OCS	PCB 1260	PCB 1254 1260	SUM PCB	COP PCB
35	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	14	14	14	14	14	14	14	14	14	14	14	14	1	1	14	14	14	14	14	14	14	14	14	14	14	14	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39	HERG	91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
40	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42	HERG	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		90	14	14	14	14	14	14	14	14	14	14	14	14	1	1	14	14	14	14	14	14	14	14	14	14	14	14	0
		91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43	DCCO	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
44	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45	DCCO	89	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
46	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48	HERG	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

SECTION 2 - DATA SUMMARIZED BY COMPOUND ANALYZED

Index to Contaminant Data, Summarized by Compound Analyzed

Table 11. Contaminant Data, Summarized by Compound Analyzed

INDEX TO CONTAMINANT DATA, SUMMARIZED BY COMPOUND ANALYZED

TABLE 11. CONTAMINANT DATA, SUMMARIZED BY COMPOUND ANALYZED*
PERCENT FAT OF EGG

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	9.1	8.5	8.6	8.9
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	8.6	8.1	8.6	9.2
		STD			1.0644	
	BLACK-	N	1			
	CROWNED	MEAN	6.26			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	5.2	4.4		
	CORMORANT	STD	0.6534	0.1155		
	CASPIAN TERN	N			1	
		MEAN			9.3	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		4.5		
ISLAND	CORMORANT	STD		0.3215		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	7.9	8.6	8.2	8.9
		STD			0.6335	
	BLACK-	N	1			
	CROWNED	MEAN	5.34			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	9.64			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	9.08		9.5	9.0
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	4.60			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	8.59		8.6	8.4
		STD				
	COMMON TERN	N	1		1	1
		MEAN	9.33		8.7	10.4
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	5.60			6.5
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PERCENT FAT OF EGG

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA RIVER	HERRING GULL	N	1	1	1	1
		MEAN	8.4	9.5	8.2	8.3
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	5.73			
		STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT COLBORNE, LIGHTHOUSE	HERRING GULL	N	1	1	1	14
		MEAN	10.4	7.8	8.1	9.1
		STD				0.8622
MIDDLE ISLAND	HERRING GULL	N	1	1	1	14
		MEAN	8.8	8.7	8.2	8.4
		STD				0.8816
EAST SISTER ISLAND	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	4.53			
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			1
		MEAN	6.25			6.3
		STD				
	GREAT EGRET	N				1
		MEAN				5.6
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING ISLAND	HERRING GULL	N	1	1	1	14
		MEAN	7.5	8.9	8.3	8.4
		STD				0.8758
	COMMON TERN	N			1	
		MEAN			8.5	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PERCENT FAT OF EGG

ST.CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				6.3
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				9.9
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			9.1	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	8.7	8.8	8.2	9.5
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	5.43			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			9.5	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			8.8	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				10.3
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	8.2	9.2	8.1	8.7
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			8.4	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN		MEAN			9.3	
SOUND		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			9.2	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			9.1	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		8.0		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PERCENT FAT OF EGG

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			9.1	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			9.9	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	4.55			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			8.9	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		8.8		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			8.8	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	8.8	9.3	8.9	10.1
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	4.58			
	CORMORANT	STD	0.2219			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			6.9	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			7.8	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	8.3	8.5	8.4	11.1
		STD	0.8518			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			8.2	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	8.3	9.5	9.3	9.5
GREEN BAY		STD	0.8472			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PERCENT FAT OF EGG

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				9.1
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				8.5
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	7.5	8.7	9.8	10.6
		STD		1.1068		
MARATHON	HERRING GULL	N				1
		MEAN				9.0
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				10.8
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			8.7	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				8.6
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				9.5
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	7.6	8.7	8.2	9.0
		STD		1.2606		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	4.35			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				8.1
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				8.6
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	4.69			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				9.7
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PERCENT WATER OF EGG

ST. LAWRENCE RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	76.0	76.6	76.3	77.4
		STD				

LAKE ONTARIO			YEAR 89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	76.9	76.1	76.4	76.6
		STD			0.8271	
	BLACK-	N	1			
	CROWNED	MEAN	80.64			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	82.90	82.5		
	CORMORANT	STD	0.9096	0.4041		
	CASPIAN TERN	N			1	
		MEAN			75.3	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		82.07		
ISLAND	CORMORANT	STD		1.1590		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	76.5	76.3	76.7	75.2
		STD			0.7938	
	BLACK-	N	1			
	CROWNED	MEAN	81.53			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	73.17			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	75.04		75.7	76.0
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	82.88			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	77.06		76.1	76.1
		STD				
	COMMON TERN	N	1		1	1
		MEAN	76.25		76.2	73.4
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	81.51			79.7
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PERCENT WATER OF EGG

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	76.4	75.6	76.8	76.5
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	81.04			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	77.6	76.0	74.7	76.8
LIGHTHOUSE		STD				0.7592
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	76.3	76.5	76.7	76.6
		STD				1.3479
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	84.06			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	80.98			79.9
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				81.6
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	77.2	76.0	76.7	77.2
		STD				0.8024
	COMMON TERN	N			1	
		MEAN			76.0	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PERCENT WATER OF EGG

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				80.8
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				73.1
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			75.2	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	76.3	75.8	76.6	76.0
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	81.83			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			75.1	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			76.1	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				74.3
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	76.5	75.7	76.7	76.1
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			77.1	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			77.0	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			76.3	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			76.5	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		74.5		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PERCENT WATER OF EGG

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			76.5	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			75.4	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	82.66			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			76.3	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		73.3		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			76.6	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	75.9	75.7	76.0	75.0
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	83.1800			
	CORMORANT	STD	0.6909			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			77.4	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			77.2	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	76.4	74.8	75.7	73.6
		STD	0.7594			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			77.0	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	75.9	76.4	76.1	75.8
GREEN BAY		STD	0.7192			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PERCENT WATER OF EGG

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				74.4
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				75.6
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	76.2	76.6	75.2	74.5
		STD		0.6203		
MARATHON	HERRING GULL	N				1
		MEAN				75.9
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				73.7
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			75.6	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				74.3
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				74.4
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	75.8	76.5	76.6	74.8
		STD		0.9486		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	83.88			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				76.0
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				74.8
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	82.82			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				75.3
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS/ALPHA-CHLORDANE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0033	0.0027	ND	0.0035
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.0041	0.0022	0.0025	0.0038
		STD			0.0000	
	BLACK-	N	1			
	CROWNED	MEAN	0.0031			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0029	0.0036		
	CORMORANT	STD	0.0000	0.0000		
	CASPIAN TERN	N			1	
		MEAN			0.0092	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.0046		
ISLAND	CORMORANT	STD		0.0000		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.0165	0.0069	0.0056	0.0072
		STD			0.0091	
	BLACK-	N	1			
	CROWNED	MEAN	0.0134			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.0288			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.0116		ND	0.0141
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0063			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0112		0.0202	0.0327
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0036		0.0061	0.0037
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0085			0.0134
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS/ALPHA-CHLORDANE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0069	0.0069	0.0069	0.0074
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0109			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0133	0.0057	ND	0.0059
LIGHTHOUSE		STD				0.0000
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0141	0.0101	0.0091	0.0114
		STD				0.0000
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0037			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0064			0.0097
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0101
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0055	0.0064	ND	0.0085
		STD				0.0000
	COMMON TERN	N			1	
		MEAN			0.0038	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS/ALPHA-CHLORDANE

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0041
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0102
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.0202	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0102	0.0065	0.0103	0.0154
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0041			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.0176	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.0202	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0235
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0130	0.0185	0.0148	0.0170
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0081	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0048	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0122	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0052		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS/ALPHA-CHLORDANE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.0110	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0062	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0035			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0127	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0083		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0148	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0072	0.0054	ND	0.0141
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0043			
	CORMORANT	STD	0.0000			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0112	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0123	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0217	0.0385	0.0337	0.0205
		STD	0.0000			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0134	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0146	0.0080	0.0117	0.0161
GREEN BAY		STD	0.0000			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS/ALPHA-CHLORDANE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0154
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.0123
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0118	0.0060	ND	0.0158
		STD		0.0000		
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.0146
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.0099
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.0177
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.0135	0.0095	0.0096	0.0203
		STD		0.0000		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0023			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0047
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0063
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0067			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0046
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS/GAMMA-CHLORDANE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	1	1	1	1
		MEAN	ND	ND	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	ND	ND	0.0008	ND
		STD			0.0000	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	ND			
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	4	3	0	
		MEAN	ND	ND		
		STD				
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		3		
		MEAN		ND		
		STD				
LESLIE STREET SPIT	HERRING GULL	N	1	1	14	1
		MEAN	ND	ND	0.0008	ND
		STD			0.0000	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	ND			
		STD				
	RING-BILLED GULL	N	1			
		MEAN	0.0016			
		STD				
HAMILTON HARBOUR	HERRING GULL	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	ND			
		STD				
	CASPIAN TERN	N	1		1	1
		MEAN	ND		ND	0.0009
		STD				
	COMMON TERN	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			1
		MEAN	ND			ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS/GAMMA-CHLORDANE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	ND	ND	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	ND	ND	ND	ND
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	ND	ND	ND
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	ND			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	ND			ND
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				ND
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	ND	ND	ND
		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS/GAMMA-CHLORDANE

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				ND
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				ND
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			ND	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	ND	ND	ND	0.0028
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0038	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			ND	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			ND	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS/GAMMA-CHLORDANE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			ND	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	ND			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	0.0012	ND	ND
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	ND			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			ND	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0005	0.0050	0.0159	ND
		STD	0.0000			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0073	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0006	ND	ND	0.0066
GREEN BAY		STD	0.0000			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS/GAMMA-CHLORDANE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	ND	0.0012	ND	ND
		STD		0.0000		
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	ND	0.0015	ND	ND
		STD		0.0000		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	ND			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	ND			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OXYCHLORDANE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0971	0.0819	0.0735	0.0945
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.1134	0.0951	0.1015	0.1285
		STD			0.0351	
	BLACK-	N	1			
	CROWNED	MEAN	0.0163			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0294	0.0500		
	CORMORANT	STD	0.0109	0.0130		
	CASPIAN TERN	N			1	
		MEAN			0.0428	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.0359		
ISLAND	CORMORANT	STD		0.0076		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.1794	0.1172	0.1069	0.1150
		STD			0.0788	
	BLACK-	N	1			
	CROWNED	MEAN	0.0491			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.0704			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.0992		0.0857	0.0714
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0397			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0349		0.0633	0.0468
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0408		0.0617	0.0317
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0463			0.0560
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OXYCHLORDANE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0617	0.0634	0.0780	0.0709
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0829			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.1054	0.0595	0.0435	0.0505
LIGHTHOUSE		STD				0.0251
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.1251	0.0763	0.0768	0.0941
		STD				0.0320
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0356			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0152			0.0195
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0281
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0627	0.0622	0.0435	0.0611
		STD				0.0284
	COMMON TERN	N			1	
		MEAN			0.0315	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OXYCHLORDANE

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0254
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0285
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.1553	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0569	0.0846	0.1361	0.0918
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0480			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.3068	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.3746	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.2917
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0824	0.1256	0.1403	0.1281
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0532	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0284	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			0.0748	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0522	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.1081		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OXYCHLORDANE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.0425	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0455	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0328			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0492	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.1619		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0708	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.1180	0.1018	0.1149	0.1402
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0385			
	CORMORANT	STD	0.0254			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0574	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0628	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.2121	0.3398	0.4196	0.4438
		STD	0.0777			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0737	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.2105	0.2634	0.2818	0.2321
GREEN BAY		STD	0.0811			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OXYCHLORDANE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.2817
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.1386
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.1406	0.1698	0.1699	0.1807
		STD		0.0787		
MARATHON	HERRING GULL	N				1
		MEAN				0.1208
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.1447
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			0.1282	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.2154
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.2847
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.1174	0.1551	0.2171	0.2139
		STD		0.0737		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.1209			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.1917
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.1886
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0781			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.1475
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234-CHLOROBENZENE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	1	1	1	1
		MEAN	ND	ND	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	ND	ND	0.0031	ND
		STD			0.0000	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	ND			
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	4	3	0	
		MEAN	ND	ND		
		STD				
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		3		
		MEAN		ND		
		STD				
LESLIE STREET SPIT	HERRING GULL	N	1	1	14	1
		MEAN	ND	ND	0.0033	ND
		STD			0.0072	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	ND			
		STD				
	RING-BILLED GULL	N	1			
		MEAN	ND			
		STD				
HAMILTON HARBOUR	HERRING GULL	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	ND			
		STD				
	CASPIAN TERN	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	COMMON TERN	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			1
		MEAN	ND			ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234-CHLOROBENZENE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	ND	ND	ND	0.0381
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	ND	ND	ND	0.0036
LIGHTHOUSE		STD				0.0000
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	0.0035	ND	0.0053
		STD				0.0106
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	ND			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	ND			ND
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				ND
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	ND	ND	0.0030
		STD				0.0000
	COMMON TERN	N			1	
		MEAN			ND	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234-CHLOROBENZENE

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				ND
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				ND
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	0.0319
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			ND	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0738	0.0406	0.0153	0.0275
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			ND	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			ND	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234-CHLOROBENZENE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			ND	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	ND			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	0.0158
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	ND			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			ND	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	ND	ND	ND	ND
		STD				
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	ND	ND	ND	ND
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234-CHLOROBENZENE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	ND	0.0039	ND	0.0133
		STD		0.0000		
MARATHON	HERRING GULL	N				1
		MEAN				0.0153
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.0139
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	ND			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	ND			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1235/1245-CHLOROBENZENE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	1	1	1	1
		MEAN	ND	ND	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	ND	ND	ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	ND			
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	4	3	0	
		MEAN	0.0031	0.0158		
		STD	0.0000	0.0202		
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		3		
		MEAN		0.0340		
		STD		0.0000		
LESLIE STREET SPIT	HERRING GULL	N	1	1	14	1
		MEAN	ND	ND	ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	ND			
		STD				
	RING-BILLED GULL	N	1			
		MEAN	ND			
		STD				
HAMILTON HARBOUR	HERRING GULL	N	1		1	1
		MEAN	ND		0.0154	0.0128
		STD				
	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	ND			
		STD				
	CASPIAN TERN	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	COMMON TERN	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			1
		MEAN	ND			ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1235/1245-CHLOROBENZENE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	ND	ND	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	ND	ND	ND	0.0046
LIGHTHOUSE		STD				0.0076
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	ND	ND	ND
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	ND			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	ND			ND
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				ND
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	ND	ND	ND
		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1235/1245-CHLOROBENZENE

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				ND
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				ND
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	0.0201	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			ND	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0326	0.0208	ND	ND
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			ND	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			ND	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1235/1245-CHLOROBENZENE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			ND	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	ND			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	ND			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			ND	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	ND	ND	0.0073	ND
		STD				
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	ND	ND	ND	ND
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1235/1245-CHLOROBENZENE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	ND	0.0044	ND	ND
		STD		0.0000		
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	ND	0.0026	ND	ND
		STD		0.0000		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	ND			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	ND			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PENTACHLOROBENZENE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	0.0029	ND	0.0100
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	ND	0.0043	0.0015	0.0079
		STD			0.0000	
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0013	ND		
	CORMORANT	STD	0.0000			
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		ND		
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.0068	0.0040	0.0016	ND
		STD			0.0000	
	BLACK-	N	1			
	CROWNED	MEAN	0.0019			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.0064			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.0071		ND	0.0105
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0029			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0027		ND	0.0040
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0028		ND	0.0038
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	ND			ND
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PENTACHLOROBENZENE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	ND	0.0036	ND	0.0078
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0028			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0074	0.0026	ND	0.0103
LIGHTHOUSE		STD				0.0108
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	0.0040	ND	0.0029
		STD				0.0000
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0022			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	ND			ND
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				ND
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	0.0038	ND	0.0042
		STD				0.0000
	COMMON TERN	N			1	
		MEAN			ND	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PENTACHLOROBENZENE

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				ND
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				ND
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	0.0019	ND	0.0064
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			ND	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0045
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0262	0.0127	ND	0.0155
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			ND	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			ND	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0039		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PENTACHLOROBENZENE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			ND	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	ND			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0035		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	0.0050	ND	0.0081
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0024			
	CORMORANT	STD	0.0000			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			ND	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	ND	0.0034	ND	ND
		STD				
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	ND	0.0023	ND	ND
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PENTACHLOROBENZENE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0043
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	ND	0.0032	ND	0.0052
		STD		0.0000		
MARATHON	HERRING GULL	N				1
		MEAN				0.0047
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	ND	0.0024	ND	ND
		STD		0.0000		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0019			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	ND			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEXACHLOROBENZENE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0458	0.0358	0.0244	0.0861
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.0703	0.0391	0.0389	0.0563
		STD			0.0211	
	BLACK-	N	1			
	CROWNED	MEAN	0.0038			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0256	0.0259		
	CORMORANT	STD	0.0116	0.0074		
	CASPIAN TERN	N			1	
		MEAN			0.0193	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.0280		
ISLAND	CORMORANT	STD		0.0088		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.0598	0.0296	0.0282	0.0440
		STD			0.0125	
	BLACK-	N	1			
	CROWNED	MEAN	0.0156			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.0475			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.0473		0.0185	0.0446
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0229			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0187		0.0197	0.0257
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0263		0.0260	0.0325
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0132			0.0140
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEXACHLOROBENZENE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0357	0.0230	0.0213	0.0325
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0200			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0523	0.0206	0.0163	0.0304
LIGHTHOUSE		STD				0.0219
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0459	0.0323	0.0301	0.0396
		STD				0.0093
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0219			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0049			0.0044
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0074
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0503	0.0334	0.0168	0.0413
		STD				0.0089
	COMMON TERN	N			1	
		MEAN			0.0070	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEXACHLOROBENZENE

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0074
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0206
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.0557	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0255	0.0271	0.0280	0.0344
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0076			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.0412	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.0722	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0722
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0778	0.0497	0.0481	0.0592
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0109	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0148	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			0.0215	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0138	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0373		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEXACHLOROBENZENE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.0129	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0197	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0127			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0117	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0386		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0190	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0378	0.0289	0.0277	0.0588
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0255			
	CORMORANT	STD	0.0090			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0094	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0094	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0479	0.0594	0.0707	0.0522
		STD	0.0132			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0103	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0351	0.0376	0.0366	0.0344
GREEN BAY		STD	0.0000			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEXACHLOROBENZENE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0562
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.0428
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0417	0.0326	0.0340	0.0431
		STD		0.0000		
MARATHON	HERRING GULL	N				1
		MEAN				0.0279
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.0367
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			0.0230	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.0484
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.0723
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.0559	0.0345	0.0410	0.0477
		STD		0.0149		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0177			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0344
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0395
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0128			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0382
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDD

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0040	0.0045	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.0048	0.0030	0.0022	0.0052
		STD			0.0000	
	BLACK-	N	1			
	CROWNED	MEAN	0.0096			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0043	0.0114		
	CORMORANT	STD	0.0000	0.0000		
	CASPIAN TERN	N			1	
		MEAN			0.0139	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.0108		
ISLAND	CORMORANT	STD		0.0000		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.0182	0.0091	0.0172	0.0096
		STD			0.0524	
	BLACK-	N	1			
	CROWNED	MEAN	0.0754			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.0021			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.0125		ND	0.0188
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0095			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0098		0.0204	0.0452
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0245		0.0136	0.0091
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0266			0.0525
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDD

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0078	0.0074	ND	0.0062
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0516			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0126	0.0058	ND	0.0068
LIGHTHOUSE		STD				0.0091
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0115	0.0128	0.0115	0.0169
		STD				0.0124
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0398			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0162			0.0218
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0288
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0120	0.0096	ND	0.0130
		STD				0.0108
	COMMON TERN	N			1	
		MEAN			0.0166	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDD

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0322
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0044
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.0150	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0055	0.0042	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0056			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.0156	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0335	0.0448	0.0331	0.0512
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0130	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			ND	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			ND	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0052		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDD

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			ND	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0088	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0048			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0028		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0043	0.0043	ND	ND
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0111			
	CORMORANT	STD	0.0076			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			ND	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0109	0.0344	0.0168	0.0114
		STD	0.0000			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0050	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0080	0.0150	ND	ND
GREEN BAY		STD	0.0000			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDD

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0067	0.0036	ND	ND
		STD		0.0000		
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.0074	0.0074	ND	ND
		STD		0.0000		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0038			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0061
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0116			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0147
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	4.3770	3.7740	2.6393	5.0227
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	5.2030	3.3680	3.4286	5.0203
		STD			2.2289	
	BLACK-	N	1			
	CROWNED	MEAN	0.7851			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	2.9405	4.3011		
	CORMORANT	STD	1.4461	1.7639		
	CASPIAN TERN	N			1	
		MEAN			3.3422	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		2.9510		
ISLAND	CORMORANT	STD		0.7088		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	5.3490	3.3450	3.6252	4.9910
		STD			1.4882	
	BLACK-	N	1			
	CROWNED	MEAN	6.8060			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	2.5090			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	5.0977		2.9642	5.2091
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	3.8610			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	3.7900		3.8191	3.7762
		STD				
	COMMON TERN	N	1		1	1
		MEAN	1.8060		1.9314	2.9087
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	2.5850			6.7800
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	2.0760	2.0150	1.7258	1.7817
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	5.2700			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	3.1450	1.5550	1.5471	1.2034
LIGHTHOUSE		STD				0.5526
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	2.2420	2.4740	2.6969	2.1618
		STD				0.8020
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	3.3570			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	3.5030			2.4997
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				3.3991
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	2.2440	1.9920	1.1421	2.2923
		STD				0.8891
	COMMON TERN	N			1	
		MEAN			0.5745	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDE

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				2.7528
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				1.0672
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			5.1898	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.7731	1.6050	1.8695	2.0601
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	3.0420			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			5.0682	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			9.7948	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				8.5024
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	7.0220	5.8890	8.0417	7.4212
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			2.9709	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.8257	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			2.4413	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			3.1177	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		3.536		
		STD				

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TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			1.4713	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			1.5377	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	2.0320			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			1.7708	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		3.146		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			3.4104	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	2.3690	2.1050	2.0711	2.6627
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	2.9877			
	CORMORANT	STD	1.8521			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			2.4511	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			2.0563	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	5.0279	8.2170	12.4401	8.4897
		STD	2.8079			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			4.2281	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	4.4609	8.0290	8.0020	4.9180
GREEN BAY		STD	0.9784			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				5.6918
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				3.0115
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	2.5910	2.5292	2.9383	3.6061
		STD		1.4058		
MARATHON	HERRING GULL	N				1
		MEAN				1.9979
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				2.3253
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			2.2631	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				4.4145
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				5.8951
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	2.4040	2.7551	4.2523	3.7600
		STD		1.2340		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	4.0650			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				3.3799
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				3.8147
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	3.5310			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				3.5766
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDT

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0195	0.0263	0.0100	0.0239
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.0274	0.0171	0.0191	0.0269
		STD			0.0182	
	BLACK-	N	1			
	CROWNED	MEAN	0.0088			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0218	0.0217		
	CORMORANT	STD	0.0103	0.0088		
	CASPIAN TERN	N			1	
		MEAN			0.0166	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.0273		
ISLAND	CORMORANT	STD		0.0074		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.0506	0.0285	0.0248	0.0313
		STD			0.0221	
	BLACK-	N	1			
	CROWNED	MEAN	0.0821			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.0228			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.0266		0.0134	0.0145
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0272			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0250		0.0201	0.0508
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0280		0.0212	0.0342
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0409			0.0480
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDT

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0097	0.0140	ND	0.0017
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0637			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0162	0.0184	ND	0.0009
LIGHTHOUSE		STD				0.0000
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0086	0.0142	0.0100	0.0007
		STD				0.0000
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0311			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0090			0.0052
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0077
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0059	0.0159	ND	0.0019
		STD				0.0000
	COMMON TERN	N			1	
		MEAN			ND	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDT

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0034
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				ND
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.0122	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0417	0.0424	0.0151	0.0084
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0220			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.0245	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.0480	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0226
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0298	0.0578	0.0036	0.0075
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0107	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0319	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0022	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0235		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDT

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.0095	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0187	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0227			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0449		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0396	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0621	0.0505	0.0079	0.0063
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0277			
	CORMORANT	STD	0.0119			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0249	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0279	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0735	0.1883	0.0527	0.0117
		STD	0.0271			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0608	0.0802	0.0607	0.0173
GREEN BAY		STD	0.0163			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DDT

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0065
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.0107
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0651	0.0523	0.0160	0.0100
		STD		0.0216		
MARATHON	HERRING GULL	N				1
		MEAN				0.0060
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.0077
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			0.0111	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.0115
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.0090
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.0633	0.0717	0.0576	0.0213
		STD		0.0359		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0328			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0124
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0503
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0301			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0055
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DIELDRIN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.1959	0.1038	0.0737	0.1153
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.1361	0.1040	0.1023	0.1215
		STD			0.0336	
	BLACK-	N	1			
	CROWNED	MEAN	0.0159			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.1291	0.1217		
	CORMORANT	STD	0.0644	0.0311		
	CASPIAN TERN	N			1	
		MEAN			0.0606	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.1243		
ISLAND	CORMORANT	STD		0.0597		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.2954	0.0990	0.1740	0.1296
		STD			0.3126	
	BLACK-	N	1			
	CROWNED	MEAN	0.1185			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.3623			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.1136		0.0697	0.0730
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.1569			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0632		0.0798	0.0732
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0692		0.0811	0.1333
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0495			0.0847
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DIELDRIN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.1341	0.0768	0.0857	0.1059
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0505			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.2340	0.1060	0.0564	0.1275
LIGHTHOUSE		STD				0.0366
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.1056	0.0848	0.1100	0.1251
		STD				0.0380
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0624			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0231			0.0384
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0679
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0619	0.0606	0.0500	0.0773
		STD				0.0216
	COMMON TERN	N			1	
		MEAN			0.0442	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DIELDRIN

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0408
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0639
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.1173	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.1537	0.1419	0.1710	0.1184
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0292			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.2255	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.4017	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.5556
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.1472	0.1645	0.1260	0.1066
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0415	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0653	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			0.0710	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0767	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0899		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DIELDRIN

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.0764	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0880	
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0420			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0930	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.1897		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0758	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.2472	0.1379	0.1567	0.2022
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.1544			
	CORMORANT	STD	0.1018			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0933	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0928	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.4950	0.7650	0.6229	0.5157
		STD	0.2666			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0874	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.5947	0.3154	0.0617	0.3001
GREEN BAY		STD	0.4322			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

DIELDRIN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.3295
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.2692
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.3315	0.2268	0.2215	0.3364
		STD		0.0987		
MARATHON	HERRING GULL	N				1
		MEAN				0.0976
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.2583
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			0.1273	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.2676
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.5857
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.3385	0.3650	0.3094	0.4623
		STD		0.3250		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.1348			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.2980
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.1574
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.1431			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.1578
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEPTACHLOR EPOXIDE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0563	0.0544	0.0352	0.0359
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.0597	0.0621	0.0507	0.0956
		STD			0.0200	
	BLACK-	N	1			
	CROWNED	MEAN	0.0066			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0345	0.0640		
	CORMORANT	STD	0.0159	0.0171		
	CASPIAN TERN	N			1	
		MEAN			0.0289	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.0544		
ISLAND	CORMORANT	STD		0.0175		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.0907	0.0421	0.0349	0.0396
		STD			0.0256	
	BLACK-	N	1			
	CROWNED	MEAN	0.0301			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.0616			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.0453		0.0291	0.0393
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0406			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0585		0.0256	0.0198
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0642		0.0215	0.0247
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0136			0.0252
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEPTACHLOR EPOXIDE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0490	0.0389	0.0386	0.0412
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0226			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0952	0.0437	0.0316	0.0448
LIGHTHOUSE		STD				0.0125
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0484	0.0612	0.0611	0.0415
		STD				0.0107
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0237			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0058			0.0086
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0059
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0219	0.0370	0.0217	0.0360
		STD				0.0139
	COMMON TERN	N			1	
		MEAN			0.0132	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEPTACHLOR EPOXIDE

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0059
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0198
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.0671	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0701	0.0793	0.0852	0.0789
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0136			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.1678	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.2937	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.2671
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0801	0.0835	0.0688	0.0555
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0308	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0205	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			0.0397	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0375	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0684		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEPTACHLOR EPOXIDE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.0298	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0230	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0170			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0342	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.1351		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0431	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.1098	0.0777	0.0735	0.0868
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0566			
	CORMORANT	STD	0.0433			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0429	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0429	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.2015	0.4158	0.3636	0.2357
		STD	0.0613			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0567	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.2079	0.2543	0.0463	0.1519
GREEN BAY		STD	0.0444			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

HEPTACHLOR EPOXIDE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.1705
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.1313
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.1418	0.1413	0.1229	0.1104
		STD		0.0505		
MARATHON	HERRING GULL	N				1
		MEAN				0.0805
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.1032
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			0.0862	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.1226
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.1987
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.1277	0.1562	0.1576	0.1358
		STD		0.0604		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0449			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0814
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0749
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0432			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0604
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

ALPHA-HEXACHLOROCYCLOHEXANE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	ND	ND	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0033	0.0033		
	CORMORANT	STD	0.0000	0.0000		
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.0040		
ISLAND	CORMORANT	STD		0.0000		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	ND	ND	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	ND			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	ND		ND	ND
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0036			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0010		ND	ND
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	ND			ND
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

ALPHA-HEXACHLOROCYCLOHEXANE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	ND	0.0004	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0009			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	ND	ND	ND	ND
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	0.0005	ND	ND
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0033			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	ND			ND
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				ND
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	ND	ND	ND
		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

ALPHA-HEXACHLOROCYCLOHEXANE

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				ND
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				ND
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			ND	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	ND	0.0005	ND	ND
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			ND	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			ND	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

ALPHA-HEXACHLOROCYCLOHEXANE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			ND	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0027			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0037			
	CORMORANT	STD	0.0000			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			ND	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	ND	0.0005	ND	ND
		STD				
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0006	ND	ND	ND
GREEN BAY		STD	0.0000			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

ALPHA-HEXACHLOROCYCLOHEXANE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	ND	ND	ND	ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN ISLANDS	HERRING GULL	N				1
		MEAN				ND
		STD				
WEST OF ALMOS SHOAL	HERRING GULL	N			1	
		MEAN			ND	
		STD				
LITTLE TRAVERSE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
LAKE LINDEN/TORCH ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
GRANITE ISLAND	HERRING GULL	N	1	14	1	1
		MEAN	ND	ND	ND	ND
		STD				
GRAVEL ISLAND	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	0.0054			
		STD				
PAPOOSE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
MUTTON ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CONE ISLAND	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	0.0043			
		STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

BETA-HEXACHLOROCYCLOHEXANE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0050	0.0060	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.0068	0.0057	ND	0.0065
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0005			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0041	0.0065		
	CORMORANT	STD	0.0000	0.0000		
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.0052		
ISLAND	CORMORANT	STD		0.0000		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.0082	0.0044	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0019			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.0047			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.0055		ND	ND
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0054			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0014		0.0003	0.0029
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0026		ND	ND
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0020			ND
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

BETA-HEXACHLOROCYCLOHEXANE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0032	0.0026	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0495			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0047	0.0021	ND	ND
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0028	0.0029	ND	ND
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0048			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0009			ND
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				ND
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	0.0013	ND	ND
		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

BETA-HEXACHLOROCYCLOHEXANE

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				ND
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				ND
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	0.0019	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0009			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			ND	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0038	0.0023	ND	ND
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			ND	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			ND	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0046		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

BETA-HEXACHLOROCYCLOHEXANE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			ND	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0016			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0034		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0029	0.0019	ND	ND
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0030			
	CORMORANT	STD	0.0000			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			ND	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0015	0.0034	ND	ND
		STD	0.0000			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0017	0.0024	ND	ND
GREEN BAY		STD	0.0000			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

BETA-HEXACHLOROCYCLOHEXANE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0028	0.0025	ND	ND
		STD		0.0000		
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.0027	0.0028	ND	ND
		STD		0.0000		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0039			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0052			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

GAMMA-HEXACHLOROCYCLOHEXANE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	1	1	1	1
		MEAN	ND	ND	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	ND	ND	ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	ND			
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	4	3	0	
		MEAN	0.0011	ND		
		STD	0.0000			
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		3		
		MEAN		ND		
		STD				
LESLIE STREET SPIT	HERRING GULL	N	1	1	14	1
		MEAN	ND	ND	ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	ND			
		STD				
	RING-BILLED GULL	N	1			
		MEAN	ND			
		STD				
HAMILTON HARBOUR	HERRING GULL	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	0.0049			
		STD				
	CASPIAN TERN	N	1		1	1
		MEAN	ND		ND	ND
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0011		ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			1
		MEAN	ND			ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

GAMMA-HEXACHLOROCYCLOHEXANE

NIAGARA RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	ND	ND	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR 89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	ND	ND	ND	ND
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	ND	ND	ND
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0013			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	ND			ND
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				ND
		STD				

DETROIT RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	ND	ND	ND
		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

GAMMA-HEXACHLOROCYCLOHEXANE

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				ND
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				ND
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			ND	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	ND	ND	ND	ND
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			ND	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			ND	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

GAMMA-HEXACHLOROCYCLOHEXANE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			ND	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			ND	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0015			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0011			
	CORMORANT	STD	0.0000			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			ND	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	ND	ND	ND	ND
		STD				
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	ND	ND	ND	ND
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

GAMMA-HEXACHLOROCYCLOHEXANE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	ND	ND	ND	ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0018			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0016			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

MIREX

ST. LAWRENCE RIVER			YEAR 89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	1	1	1	1
		MEAN	0.9299	0.7513	0.5096	0.8301
		STD				

LAKE ONTARIO			YEAR 89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	1.0970	0.5990	0.5397	0.7464
		STD			0.2335	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	0.2671			
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	4	3	0	
		MEAN	0.4038	0.6509		
		STD	0.1204	0.2010		
	CASPIAN TERN	N			1	
		MEAN			0.7672	
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		3		
		MEAN		0.4873		
		STD		0.1173		
LESLIE STREET SPIT	HERRING GULL	N	1	1	14	1
		MEAN	1.1940	0.6831	0.6169	0.7976
		STD			0.1675	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	0.5190			
		STD				
	RING-BILLED GULL	N	1			
		MEAN	0.4744			
		STD				
HAMILTON HARBOUR	HERRING GULL	N	1		1	1
		MEAN	0.7983		0.5009	0.5965
		STD				
	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	0.4309			
		STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.7703		0.7187	0.5948
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.4849		0.3809	0.4878
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			1
		MEAN	0.4026			0.4200
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

MIREX

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.2378	0.2807	0.2313	0.1927
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.5475			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.3280	0.1215	0.1038	0.0750
LIGHTHOUSE		STD				0.0846
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0323	0.0970	0.0422	0.0339
		STD				0.0211
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0727			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0067			0.0076
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0249
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0383	0.0293	0.0249	0.0532
		STD				0.0687
	COMMON TERN	N			1	
		MEAN			0.0136	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

MIREX

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0143
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0225
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.0545	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0455	0.0953	0.1200	0.0309
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0524			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.0645	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.1497	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0696
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0911	0.1387	0.0622	0.0450
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0333	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0491	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			0.1743	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.1670	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.3677		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

MIREX

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.1180	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0710	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0369			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0529	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.1059		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0743	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.1377	0.1166	0.0938	0.0598
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0374			
	CORMORANT	STD	0.0439			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0365	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0244	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0430	0.0820	0.1832	0.0442
		STD	0.0326			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0324	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0322	0.0338	0.0481	0.0484
GREEN BAY		STD	0.0279			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

MIREX

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0947
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.1040
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0941	0.0519	0.0643	0.0731
		STD		0.0599		
MARATHON	HERRING GULL	N				1
		MEAN				0.0434
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.0777
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			0.0495	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.1823
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.0836
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.0454	0.0635	0.0698	0.0654
		STD		0.0806		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0458			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0320
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0394
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0264			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0888
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PHOTOMIREX

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.3279	0.2795	0.1904	0.3269
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.4303	0.2420	0.2277	0.3122
		STD			0.1059	
	BLACK-	N	1			
	CROWNED	MEAN	0.0958			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.1413	0.2370		
	CORMORANT	STD	0.0426	0.0585		
	CASPIAN TERN	N			1	
		MEAN			0.2962	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.1935		
ISLAND	CORMORANT	STD		0.0687		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.4403	0.2751	0.2586	0.3270
		STD			0.0777	
	BLACK-	N	1			
	CROWNED	MEAN	0.1704			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.2029			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.3257		0.2081	0.2442
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.1659			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.2569		0.2545	0.2341
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.1541		0.1385	0.1844
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.1601			0.1806
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PHOTOMIREX

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.1014	0.1130	0.0936	0.0763
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.2234			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.1323	0.0477	0.0401	0.0276
LIGHTHOUSE		STD				0.0351
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	0.0399	0.0154	ND
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0263			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0008			ND
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				ND
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	ND	ND	ND	0.0122
		STD				0.0278
	COMMON TERN	N			1	
		MEAN			ND	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PHOTOMIREX

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0046
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0071
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.0238	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0181	0.0406	0.0521	0.0145
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0175			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.0376	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.0808	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0358
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0383	0.0564	0.0250	0.0202
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0132	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0197	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			0.0745	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0612	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.1657		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PHOTOMIREX

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.0429	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0348	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0121			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0318	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0492		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0368	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0768	0.0430	0.0400	0.0267
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0159			
	CORMORANT	STD	0.0225			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0158	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0120	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0235	0.0424	0.0888	0.0236
		STD	0.0142			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0159	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0157	0.0204	0.0272	0.0245
GREEN BAY		STD	0.0133			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PHOTOMIREX

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0379
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.0470
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0413	0.0260	0.0268	0.0285
		STD		0.0246		
MARATHON	HERRING GULL	N				1
		MEAN				0.0215
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.0239
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			0.0229	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.0691
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.0436
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.0247	0.0344	0.0340	0.0366
		STD		0.0420		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0283			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0187
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0199
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0148			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0363
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS-NONACHLOR

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	1	1	1	1
		MEAN	0.0367	0.0344	0.0216	0.0428
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.0642	0.0458	0.0414	0.0640
		STD			0.0206	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	0.0145			
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	4	3	0	
		MEAN	0.0206	0.0250		
		STD	0.0097	0.0000		
	CASPIAN TERN	N			1	
		MEAN			0.0197	
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		3		
		MEAN		0.0224		
		STD		0.0000		
LESLIE STREET SPIT	HERRING GULL	N	1	1	14	1
		MEAN	0.0790	0.0469	0.0320	0.0516
		STD			0.0144	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	0.0526			
		STD				
	RING-BILLED GULL	N	1			
		MEAN	0.0464			
		STD				
HAMILTON HARBOUR	HERRING GULL	N	1		1	1
		MEAN	0.0564		0.0183	0.0478
		STD				
	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	0.0323			
		STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0326		0.0327	0.0515
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0250		0.0286	0.0181
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			1
		MEAN	0.0385			0.0536
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS-NONACHLOR

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0286	0.0249	0.0311	0.0354
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0856			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0602	0.0355	0.0180	0.0293
LIGHTHOUSE		STD				0.0086
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0386	0.0372	0.0291	0.0422
		STD				0.0103
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0282			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0131			0.0187
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0188
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0180	0.0265	0.0094	0.0272
		STD				0.0000
	COMMON TERN	N			1	
		MEAN			0.0083	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS-NONACHLOR

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0149
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0504
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.0585	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0328	0.0397	0.0376	0.0531
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0240			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.0892	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.1343	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.1082
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0369	0.0421	0.0431	0.0577
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0198	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0157	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			0.0242	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0228	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0466		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS-NONACHLOR

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.0262	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0268	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0248			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0242	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0674		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0401	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0548	0.0482	0.0499	0.0730
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0250			
	CORMORANT	STD	0.0089			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0222	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0241	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0646	0.1371	0.1278	0.0953
		STD	0.0244			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0245	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0531	0.0717	0.0677	0.0667
GREEN BAY		STD	0.0000			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

CIS-NONACHLOR

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0992
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.0733
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0495	0.0568	0.0504	0.0622
		STD		0.0218		
MARATHON	HERRING GULL	N				1
		MEAN				0.0424
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.0625
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			0.0357	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.0765
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.0811
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.0584	0.0668	0.0788	0.0919
		STD		0.0330		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0537			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0671
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0569
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0513			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0529
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS-NONACHLOR

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	1	1	1	1
		MEAN	0.0776	0.0741	0.0527	0.0938
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.0779	0.0484	0.0526	0.0747
		STD			0.0244	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	0.0335			
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	4	3	0	
		MEAN	0.0088	0.0125		
		STD	0.0000	0.0000		
	CASPIAN TERN	N			1	
		MEAN			0.0833	
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		3		
		MEAN		0.0090		
		STD		0.0000		
LESLIE STREET SPIT	HERRING GULL	N	1	1	14	1
		MEAN	0.1260	0.0494	0.0552	0.0843
		STD			0.0343	
	BLACK-CROWNED NIGHT-HERON	N	1			
		MEAN	0.1350			
		STD				
	RING-BILLED GULL	N	1			
		MEAN	0.2108			
		STD				
HAMILTON HARBOUR	HERRING GULL	N	1		1	1
		MEAN	0.0763		0.0269	0.0804
		STD				
	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	0.0253			
		STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.1095		0.1071	0.1287
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0401		0.0626	0.0719
		STD				
	BLACK-CROWNED NIGHT-HERON	N	1			1
		MEAN	0.1271			0.1224
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS-NONACHLOR

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0479	0.0334	0.0353	0.0488
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.1825			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0674	0.0382	0.0295	0.0454
LIGHTHOUSE		STD				0.0097
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0600	0.0644	0.0695	0.0688
		STD				0.0215
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0208			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0367			0.0396
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0670
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0488	0.0517	0.0303	0.0583
		STD				0.0150
	COMMON TERN	N			1	
		MEAN			0.0220	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS-NONACHLOR

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0307
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.1094
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.1127	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0319	0.0518	0.0538	0.0815
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0627			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.0951	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.1478	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.1763
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.1262	0.1346	0.1494	0.1664
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0888	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			0.0341	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			0.0380	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0953	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0522		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS-NONACHLOR

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			0.0816	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0577	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0106			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0832	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0582		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			0.1305	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0673	0.0477	0.0619	0.0753
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0142			
	CORMORANT	STD	0.0000			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			0.0855	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			0.0803	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.1010	0.1768	0.1955	0.1291
		STD	0.0409			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.1055	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0948	0.0916	0.1137	0.0953
GREEN BAY		STD	0.0131			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TRANS-NONACHLOR

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.1364
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.1001
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0781	0.0547	0.0648	0.0924
		STD		0.0166		
MARATHON	HERRING GULL	N				1
		MEAN				0.0474
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.0943
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			0.0435	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.1171
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.2013
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.1003	0.0797	0.1109	0.1408
		STD		0.0363		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0206			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0746
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0718
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0216			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0939
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLOROSTYRENE

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0264	0.0189	0.0120	0.0345
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	0.0290	0.0151	0.0176	0.0292
		STD			0.0105	
	BLACK-	N	1			
	CROWNED	MEAN	ND			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	0.0136	0.0194		
	CORMORANT	STD	0.0000	0.0000		
	CASPIAN TERN	N			1	
		MEAN			0.0143	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		0.0168		
ISLAND	CORMORANT	STD		0.0000		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	0.0277	0.0122	0.0104	0.0221
		STD			0.0000	
	BLACK-	N	1			
	CROWNED	MEAN	0.0160			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	0.0234			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	0.0214		0.0086	0.0242
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	0.0169			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	0.0131		0.0163	0.0170
		STD				
	COMMON TERN	N	1		1	1
		MEAN	0.0124		0.0229	0.0278
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0105			0.0150
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLOROSTYRENE

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	0.0104	0.0061	0.0074	0.0127
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0156			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	0.0170	0.0073	ND	0.0091
LIGHTHOUSE		STD				0.0000
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0363	0.0228	0.0278	0.0379
		STD				0.0164
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0152			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	0.0061			0.0048
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				0.0064
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	0.0406	0.0294	0.0145	0.0351
		STD				0.0075
	COMMON TERN	N			1	
		MEAN			0.0168	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLOROSTYRENE

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				0.0117
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				0.0457
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			0.1094	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0101	0.0107	0.0141	0.0134
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	0.0072			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			0.0111	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			0.0169	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0175
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	0.0738	0.0537	0.0494	0.0655
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			0.0136	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			ND	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			0.0085	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			0.0080	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		0.0102		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLOROSTYRENE

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			ND	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			0.0090	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	0.0060			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		0.0109		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			ND	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	0.0116	0.0080	0.0088	0.0102
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	0.0107			
	CORMORANT	STD	0.0000			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			ND	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			ND	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	0.0071	0.0109	0.0153	0.0121
		STD	0.0074			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			0.0086	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	0.0065	0.0098	ND	0.0132
GREEN BAY		STD	0.0000			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLOROSTYRENE

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0154
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.0125
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	0.0129	0.0083	0.0102	0.0158
		STD		0.0000		
MARATHON	HERRING GULL	N				1
		MEAN				0.0075
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				0.0110
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.0136
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.0157
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	0.0137	0.0075	0.0088	0.0132
		STD		0.0000		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	0.0083			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0005
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0005
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	0.0042			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0082
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1260

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	21.4800	15.3700	9.0804	16.6040
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	15.1400	9.1200	8.0354	9.1277
		STD			3.0699	
	BLACK-	N	1			
	CROWNED	MEAN	4.0950			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	6.5043	11.3838		
	CORMORANT	STD	2.6103	3.2335		
	CASPIAN TERN	N			1	
		MEAN			9.8598	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		7.5930		
ISLAND	CORMORANT	STD		1.5266		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	18.8100	9.7600	9.6509	11.2025
		STD			2.5461	
	BLACK-	N	1			
	CROWNED	MEAN	6.1000			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	7.3460			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	16.7000		9.7111	14.5688
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	9.9220			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	11.9500		9.8826	8.0435
		STD				
	COMMON TERN	N	1		1	1
		MEAN	5.7990		4.6346	6.4003
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	14.7200			7.8280
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1260

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	9.6150	8.9070	7.0688	7.7635
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	8.4400			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	18.6200	10.1900	8.8117	7.9065
LIGHTHOUSE		STD				2.7249
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	25.3200	28.9600	22.3818	19.5309
		STD				7.0116
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	13.3800			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	5.4800			3.5123
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				3.2475
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	39.1000	52.0700	15.1883	18.7751
		STD				4.2431
	COMMON TERN	N			1	
		MEAN			4.9488	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1260

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				1.1960
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				4.2889
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			18.7369	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	2.8570	5.7430	4.7291	4.6539
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	2.9080			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			6.6543	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			13.3968	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				9.8293
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	20.3400	19.6500	20.1715	18.8607
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			8.0757	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			2.0933	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			5.0365	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			5.3517	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		8.080		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1260

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			4.1242	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			3.6948	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	5.2150			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			4.4157	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		6.320		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			7.6333	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	6.7100	5.8710	4.4067	4.4617
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	4.8933			
	CORMORANT	STD	4.4442			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			5.6672	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			4.7893	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	7.5825	11.7200	14.8788	8.7322
		STD	3.4139			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			7.1028	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	7.3963	12.2000	8.9308	6.0129
GREEN BAY		STD	1.5523			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1260

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				8.7704
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				4.7562
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	6.3990	4.6157	5.4364	5.5155
		STD		1.8703		
MARATHON	HERRING GULL	N				1
		MEAN				4.1359
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				4.0099
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			3.8186	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				6.4974
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				11.3689
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	6.3420	4.6396	6.7588	6.0421
		STD		1.8837		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	6.2640			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				5.5232
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				5.5688
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	3.9290			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				6.6840
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1254-1260

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	42.4200	29.2100	17.9642	32.8280
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	31.2400	18.1500	16.0457	20.5839
		STD			6.7563	
	BLACK-	N	1			
	CROWNED	MEAN	7.9760			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	13.7385	22.2755		
	CORMORANT	STD	5.3067	7.0433		
	CASPIAN TERN	N			1	
		MEAN			17.4998	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		15.0916		
ISLAND	CORMORANT	STD		2.4755		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	33.6500	18.7300	18.0716	21.7742
		STD			5.5048	
	BLACK-	N	1			
	CROWNED	MEAN	16.1100			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	14.8300			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	33.6400		17.2540	28.1595
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	20.1000			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	20.5400		16.3020	15.3081
		STD				
	COMMON TERN	N	1		1	1
		MEAN	10.8900		9.3478	12.8504
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	25.1900			15.2562
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1254-1260

NIAGARA RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	19.1500	15.7200	13.4911	15.2039
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	19.0300			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR 89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	33.1800	17.3100	14.9915	13.8537
LIGHTHOUSE		STD				4.4187
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	45.2400	42.8700	38.1131	35.0266
		STD				12.1410
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	22.9300			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	7.5230			5.8409
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				5.6663
		STD				

DETROIT RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	56.6300	39.4800	22.1696	30.8029
		STD				6.3607
	COMMON TERN	N			1	
		MEAN			7.9854	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1254-1260

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				2.4039
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				8.3057
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			36.3751	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	6.2470	11.2100	10.1489	10.1905
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	6.0090			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			15.5515	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			29.9747	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				24.4690
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	51.9400	47.1000	48.0701	45.1752
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			16.5560	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			4.2061	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			10.0157	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			10.2062	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		16.09		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1254-1260

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			7.4834	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			6.8538	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	9.8180			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			8.5625	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		13.97		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			14.5517	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	14.1300	11.4700	9.8689	10.2124
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	11.1020			
	CORMORANT	STD	9.7771			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			11.3576	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			10.2978	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	20.7907	31.7300	37.6856	23.2726
		STD	9.3034			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			15.8198	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	21.1993	32.6500	24.8638	17.2301
GREEN BAY		STD	3.8514			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB:1254-1260

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				20.0444
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				10.8222
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	15.0200	11.4996	12.6750	13.2008
		STD		4.1630		
MARATHON	HERRING GULL	N				1
		MEAN				9.5144
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				9.5199
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			9.2863	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				15.8233
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				22.6682
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	15.1500	11.7349	15.4968	14.7210
		STD		4.2708		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	12.5800			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				12.4619
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				14.3796
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	8.9530			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				13.9049
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TOTAL PCB CONGENERS

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	22.1738	15.0817	9.5343	18.8554
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	14	1
		MEAN	14.1928	7.9733	7.6815	10.1265
		STD			3.2929	
	BLACK-	N	1			
	CROWNED	MEAN	3.6130			
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	4	3	0	
ISLAND	CRESTED	MEAN	6.5412	11.1116		
	CORMORANT	STD	2.5914	3.4017		
	CASPIAN TERN	N			1	
		MEAN			8.9674	
		STD				
LITTLE	DOUBLE-	N		3		
GALLOO	CRESTED	MEAN		7.6044		
ISLAND	CORMORANT	STD		1.4564		
LESLIE	HERRING GULL	N	1	1	14	1
STREET SPIT		MEAN	15.8187	8.4391	8.4610	10.4471
		STD			2.5108	
	BLACK-	N	1			
	CROWNED	MEAN	7.4740			
	NIGHT-HERON	STD				
	RING-BILLED	N	1			
	GULL	MEAN	6.8850			
		STD				
HAMILTON	HERRING GULL	N	1		1	1
HARBOUR		MEAN	15.5100		8.0799	14.1842
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	9.3540			
	CORMORANT	STD				
	CASPIAN TERN	N	1		1	1
		MEAN	10.1100		8.5430	8.3595
		STD				
	COMMON TERN	N	1		1	1
		MEAN	5.2870		5.1395	6.6418
		STD				
	BLACK-	N	1			1
	CROWNED	MEAN	12.2200			7.9754
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TOTAL PCB CONGENERS

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	8.6891	7.1117	6.6310	7.4522
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	9.0400			
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	14
COLBORNE,		MEAN	15.4240	8.0706	7.3044	6.9127
LIGHTHOUSE		STD				2.0019
MIDDLE	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	20.5088	20.4007	18.6226	17.3743
		STD				5.8015
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	11.0100			
	CORMORANT	STD				
	BLACK-	N	1			1
	CROWNED	MEAN	3.9920			2.9795
	NIGHT-HERON	STD				
	GREAT EGRET	N				1
		MEAN				2.9654
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	14
ISLAND		MEAN	26.7446	21.8717	11.2658	15.6841
		STD				2.9927
	COMMON TERN	N			1	
		MEAN			4.4125	
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TOTAL PCB CONGENERS

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				1
ISLAND	CROWNED	MEAN				1.2194
	NIGHT-HERON	STD				
	FORSTERS	N				1
	TERN	MEAN				4.5310
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			18.2003	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	3.0617	5.2041	5.2569	5.5230
		STD				
	BLACK-	N	1			
	CROWNED	MEAN	2.8270			
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			7.6208	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			13.8632	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				11.8842
		STD				
CHANNEL	HERRING GULL	N	1	1	1	1
SHELTER		MEAN	27.5921	24.8080	27.4901	27.6861
ISLAND		STD				
	CASPIAN TERN	N			1	
		MEAN			9.3932	
		STD				
FLAT ROCK,	COMMON TERN	N			1	
SEVERN SOUND		MEAN			2.1243	
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			4.7672	
		STD				
SOUTH	CASPIAN TERN	N			1	
WATCHER		MEAN			5.4522	
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		7.386		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TOTAL PCB CONGENERS

LAKE HURON (CONT.)			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			1	
LIMESTONE		MEAN			4.2891	
ISLAND		STD				
	COMMON TERN	N			1	
		MEAN			3.5596	
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	4.8000			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			1	
ISLAND		MEAN			4.5960	
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		6.373		
		STD				
THE COUSINS	CASPIAN TERN	N			1	
ISLAND		MEAN			7.6809	
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	6.9751	5.3610	4.9374	5.0955
		STD				
WEST ISLAND	DOUBLE-	N	3			
	CRESTED	MEAN	5.0720			
	CORMORANT	STD	4.4359			

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			1	
GALETS		MEAN			5.9999	
		STD				
HAT ISLAND	CASPIAN TERN	N			1	
		MEAN			5.2014	
		STD				
GULL ISLAND	HERRING GULL	N	14	1	1	1
		MEAN	9.0638	13.9358	17.3537	10.8070
		STD	4.0951			
GRAVELLY	CASPIAN TERN	N			1	
ISLAND		MEAN			9.1647	
		STD				
BIG SISTER	HERRING GULL	N	14	1	1	1
ISLAND,		MEAN	9.6992	15.1839	12.8251	8.8241
GREEN BAY		STD	1.7935			

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

TOTAL PCB CONGENERS

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				9.6398
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				5.4900
		STD				
AGAWA ROCK	HERRING GULL	N	1	14	1	1
		MEAN	6.7062	5.1678	6.1566	6.7842
		STD		1.7299		
MARATHON	HERRING GULL	N				1
		MEAN				4.5786
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				4.5785
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			4.3630	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				8.2208
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				11.5667
ISLAND		STD				
GRANITE	HERRING GULL	N	1	14	1	1
ISLAND		MEAN	6.9901	5.4149	7.6433	7.5538
		STD		1.8866		
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	5.8490			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				6.3381
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				7.3336
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	4.0430			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				6.7565
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB37 3,4,4'-TRICHLOROBIPHENYL

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	0	0	0	1
		MEAN				<0.0001
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	0	0	5	
		MEAN			ND	
		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		0		
		MEAN				
		STD				
LESLIE STREET SPIT	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
	RING-BILLED GULL	N	0			
		MEAN				
		STD				
HAMILTON HARBOUR	HERRING GULL	N	0		0	1
		MEAN				<0.0001
		STD				
	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB37 3,4,4'-TRICHLOROBIPHENYL

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA RIVER	HERRING GULL	N	0	0	0	1
		MEAN				<0.0001
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT COLBORNE, LIGHTHOUSE	HERRING GULL	N	0	0	0	1
		MEAN				<0.0001
		STD				
MIDDLE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				<0.0001
		STD				
EAST SISTER ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			0
		MEAN				
		STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				<0.0001
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB37 3,4,4'-TRICHLOROBIPHENYL

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				<0.0001i
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				<0.0001
		STD				
CHANNEL	HERRING GULL	N	0	0	0	0
SHELTER		MEAN				
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB37 3,4,4'-TRICHLOROBIPHENYL

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				<0.0001
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				<0.0001
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	0	1
ISLAND,		MEAN				<0.0001
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB37 3,4,4'-TRICHLOROBIPHENYL

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				<0.0001
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				<0.0001
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	0	1
		MEAN				<0.0001
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				<0.0001
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			0	
ALMOS SHOAL		MEAN				
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				<0.0001
		STD				
GRAVEL	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				<0.0001
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				<0.0001
		STD				
CONE ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB77 3,3',4,4'-TETRACHLOROBIPHENYL

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0010
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				0.0005
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	5	
ISLAND	CRESTED	MEAN			0.0003	
	CORMORANT	STD			0.0001	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	0	0	0	1
STREET SPIT		MEAN				0.0003
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		0	1
HARBOUR		MEAN				0.0005
		STD				
	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB77 3,3',4,4'-TETRACHLOROBIPHENYL

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	0	0	0	1
RIVER		MEAN				0.0008
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	0	0	0	1
COLBORNE,		MEAN				0.0009
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				<0.0001
		STD				
EAST SISTER	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0005
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB77 3,3',4,4'-TETRACHLOROBIPHENYL

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0010
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0015
		STD				
CHANNEL	HERRING GULL	N	0	0	0	0
SHELTER		MEAN				
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB77 3,3',4,4'-TETRACHLOROBIPHENYL

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0004
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				0.0023
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	0	1
ISLAND,		MEAN				0.0033
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB77 3,3',4,4'-TETRACHLOROBIPHENYL

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0006
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.0011
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	0	1
		MEAN				0.0020
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				0.0002
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				<0.0001
		STD				
WEST OF	HERRING GULL	N			0	
ALMOS SHOAL		MEAN				
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				0.0004
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				0.0009
ISLAND		STD				
GRANITE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0017
		STD				
GRAVEL	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.0003
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.0002
		STD				
CONE ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0001
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB126 3,3',4,4',5-PENTACHLOROBIPHENYL

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0048
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				0.0036
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	5	
ISLAND	CRESTED	MEAN			0.0036	
	CORMORANT	STD			0.0008	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	0	0	0	1
STREET SPIT		MEAN				0.0035
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		0	1
HARBOUR		MEAN				0.0032
		STD				
	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB126 3,3',4,4',5-PENTACHLOROBIPHENYL

NIAGARA RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	0	0	0	1
RIVER		MEAN				0.0019
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR 89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	0	0	0	1
COLBORNE,		MEAN				0.0016
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0050
		STD				
EAST SISTER	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0032
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB126 3,3',4,4',5-PENTACHLOROBIPHENYL

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0021
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0064
		STD				
CHANNEL	HERRING GULL	N	0	0	0	0
SHELTER		MEAN				
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB126 3,3',4,4',5-PENTACHLOROBIPHENYL

LAKE HURON			YEAR			
			89	90	91	92
COLONY SOUTH LIMESTONE ISLAND	SPECIES					
	CASPIAN TERN	N			0	
		MEAN				
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL ISLANDS	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
HALFMOON ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
WEST MARY ISLAND	HERRING GULL	N		0		
		MEAN				
		STD				
THE COUSINS ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
DOUBLE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				0.0029
		STD				
WEST ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY ISLE AUX GALETS	SPECIES					
	CASPIAN TERN	N			0	
		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				0.0074
		STD				
GRAVELLY ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
BIG SISTER ISLAND, GREEN BAY	HERRING GULL	N	0	0	0	1
		MEAN				0.0049
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB126 3,3',4,4',5-PENTACHLOROBIPHENYL

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.0053
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.0029
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	0	1
		MEAN				0.0031
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				0.0022
		STD				
LEADMAN ISLANDS	HERRING GULL	N				1
		MEAN				<0.0001
		STD				
WEST OF ALMOS SHOAL	HERRING GULL	N			0	
		MEAN				
		STD				
LITTLE TRAVERSE ISLAND	HERRING GULL	N				1
		MEAN				0.0038
		STD				
LAKE LINDEN/TORCH ISLAND	HERRING GULL	N				1
		MEAN				0.0040
		STD				
GRANITE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				0.0035
		STD				
GRAVEL ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
PAPOOSE ISLAND	HERRING GULL	N				1
		MEAN				0.0029
		STD				
MUTTON ISLAND	HERRING GULL	N				1
		MEAN				0.0031
		STD				
CONE ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.0029
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB169 3,3',4,4',5,5'-HEXACHLOROBIPHENYL

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	0	0	0	1
		MEAN				0.0004
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				0.0003
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	0	0	5	
		MEAN			0.0004	
		STD			0.0002	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		0		
		MEAN				
		STD				
LESLIE STREET SPIT	HERRING GULL	N	0	0	0	1
		MEAN				0.0003
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
	RING-BILLED GULL	N	0			
		MEAN				
		STD				
HAMILTON HARBOUR	HERRING GULL	N	0		0	1
		MEAN				0.0002
		STD				
	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB169 3,3',4,4',5,5'-HEXACHLOROBIPHENYL

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	0	0	0	1
RIVER		MEAN				0.0002
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	0	0	0	1
COLBORNE,		MEAN				0.0001
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0004
		STD				
EAST SISTER	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0003
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB169 3,3',4,4',5,5'-HEXACHLOROBIPHENYL

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0003
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.0007
		STD				
CHANNEL	HERRING GULL	N	0	0	0	0
SHELTER		MEAN				
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB169 3,3',4,4',5,5'-HEXACHLOROBIPHENYL

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.0004
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				0.0007
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	0	1
ISLAND,		MEAN				0.0004
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

PCB169 3,3',4,4',5,5'-HEXACHLOROBIPHENYL

LAKE SUPERIOR				YEAR			
				89	90	91	92
COLONY	SPECIES						
GULL ISLAND	HERRING GULL		N				1
			MEAN				0.0006
			STD				
CHENE ISLAND	HERRING GULL		N				1
			MEAN				0.0003
			STD				
AGAWA ROCK	HERRING GULL		N	0	0	0	1
			MEAN				0.0003
			STD				
MARATHON	HERRING GULL		N				1
			MEAN				0.0003
			STD				
LEADMAN	HERRING GULL		N				1
ISLANDS			MEAN				ND
			STD				
WEST OF	HERRING GULL		N			0	
ALMOS SHOAL			MEAN				
			STD				
LITTLE	HERRING GULL		N				1
TRAVERSE			MEAN				0.0004
ISLAND			STD				
LAKE	HERRING GULL		N				1
LINDEN/TORCH			MEAN				0.0006
ISLAND			STD				
GRANITE	HERRING GULL		N	0	0	0	1
ISLAND			MEAN				0.0004
			STD				
GRAVEL	DOUBLE-		N	0			
ISLAND	CRESTED		MEAN				
	CORMORANT		STD				
PAPOOSE	HERRING GULL		N				1
ISLAND			MEAN				0.0003
			STD				
MUTTON	HERRING GULL		N				1
ISLAND			MEAN				0.0003
			STD				
CONE ISLAND	DOUBLE-		N	0			
	CRESTED		MEAN				
	CORMORANT		STD				
KNIFE ISLAND	HERRING GULL		N				1
			MEAN				0.0003
			STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZO-p-DIOXIN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	43	46	24	45.8
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	91	66	51	70.9
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	5	
ISLAND	CRESTED	MEAN	18		35.6	
	CORMORANT	STD			10.3586	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	1	1
STREET SPIT		MEAN	55	44	26	51.2
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			16	29.3
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	18			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZO-p-DIOXIN

NIAGARA RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	18	18	17	13.5
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR 89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	19	8	11	6.3
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	16	21	16	19.3
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	20			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	13	14	10	16.7
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZO-p-DIOXIN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			18	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	12	17	20	13.6
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			27	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			27	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				21.8
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	78	85	53	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			21	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		47		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZO-p-DIOXIN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	18			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		43		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	18	27	19	23.2
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	14			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	11	14	21	15.0
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	10	12	12	12.4
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZO-p-DIOXIN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				16.9
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				25.4
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	19	19	13	15.8
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				11.2
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				13.4
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			11	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				26.2
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				15.4
ISLAND		STD				
GRANITE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	16	16	14	15.6
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	9			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				6.8
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				8.2
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	12			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				11.0
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378-PENTACHLORODIBENZO-p-DIOXIN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	7	9	5	9.9
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	11	10	8	12.1i
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	5	
ISLAND	CRESTED	MEAN	17		32.0	
	CORMORANT	STD			5.4314	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	0	1
STREET SPIT		MEAN	8	7		7.2i
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			(3)	8.4i
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	21			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378-PENTACHLORODIBENZO-p-DIOXIN

NIAGARA RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	5	5	4	17.5i
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR 89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	7	7	4	13.7i
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	12	13	13	21.1
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	22			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	6	6	(3)	2.5i
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378-PENTACHLORODIBENZO-p-DIOXIN

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			(3)	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	6	12	10	10.5i
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			21	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			21	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				32.7i
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	18	27	14	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			10	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		13		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378-PENTACHLORODIBENZO-p-DIOXIN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	27			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		22		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	8	16	9	7.7
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	21			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	15	20	19	32.1i
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	9	17	16	14.5i
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378-PENTACHLORODIBENZO-p-DIOXIN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				12.0i
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				8.6i
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	14	16	12	19.6i
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				10.2
		STD				
LEADMAN ISLANDS	HERRING GULL	N				1
		MEAN				5.3i
		STD				
WEST OF ALMOS SHOAL	HERRING GULL	N			1	
		MEAN			7	
		STD				
LITTLE TRAVERSE ISLAND	HERRING GULL	N				1
		MEAN				16.2
		STD				
LAKE LINDEN/TORCH ISLAND	HERRING GULL	N				1
		MEAN				30.4i
		STD				
GRANITE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	16	15	12	17.6
		STD				
GRAVEL ISLAND	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	14			
		STD				
PAPOOSE ISLAND	HERRING GULL	N				1
		MEAN				12.1
		STD				
MUTTON ISLAND	HERRING GULL	N				1
		MEAN				12.4
		STD				
CONE ISLAND	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	21			
		STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZO-p-DIOXIN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	ND	ND	ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	1	0	5	
		MEAN	(2)		5.8	
		STD			2.7749	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		0		
		MEAN				
		STD				
LESLIE STREET SPIT	HERRING GULL	N	1	1	1	1
		MEAN	ND	ND	ND	2.2i
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
	RING-BILLED GULL	N	0			
		MEAN				
		STD				
HAMILTON HARBOUR	HERRING GULL	N	0		1	1
		MEAN			ND	(0.1)
		STD				
	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	(2)			
		STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZO-p-DIOXIN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	ND	ND	ND	(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	ND	ND	ND	ND
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(1)	ND	(1)	1.2
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	(2)			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	(0.2)
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZO-p-DIOXIN

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			(1)	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			ND	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				(0.1)
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	(1)	(1)	(1)	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZO-p-DIOXIN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	(3)			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	ND	(0.5)
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	(2)			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	(1)	ND	ND	(0.6)
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	ND	ND	ND	(0.1)
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZO-p-DIOXIN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				(0.5)
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				(0.1)
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	(1)	ND	ND	ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				(0.2)
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				(0.1)
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			ND	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				(0.2)
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(1)	(1)	(1)	(0.6)
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	(1)			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				0.5
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				(0.4)
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	(3)			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				(0.4)
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZO-p-DIOXIN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	10	10	5	7.7
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	13	12	10	7.5
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	1	0	5	
ISLAND	CRESTED	MEAN	11		36.8	
	CORMORANT	STD			15.6109	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	1	1
STREET SPIT		MEAN	13	10	10	4.4
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			7	11.2
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	19			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZO-p-DIOXIN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	7	7	7	(0.7)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	8	8	9	3.3
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	26	19	21	26.1
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	25			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	21	16	9	13.9
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZO-p-DIOXIN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			7	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	7	12	10	2.6
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			17	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			20	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				20.3
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	33	32	29	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			8	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		13		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZO-p-DIOXIN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	21			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		16		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	10	15	10	14.7
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	17			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	14	18	21	20.3
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	8	18	15	13.7
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZO-p-DIOXIN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				23.6
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				4.4
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	11	17	12	16.4
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				11.1
		STD				
LEADMAN ISLANDS	HERRING GULL	N				1
		MEAN				8.2
		STD				
WEST OF ALMOS SHOAL	HERRING GULL	N			1	
		MEAN			8	
		STD				
LITTLE TRAVERSE ISLAND	HERRING GULL	N				1
		MEAN				13.6
		STD				
LAKE LINDEN/TORCH ISLAND	HERRING GULL	N				1
		MEAN				11.8
		STD				
GRANITE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	17	16	15	16.5
		STD				
GRAVEL ISLAND	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	18			
		STD				
PAPOOSE ISLAND	HERRING GULL	N				1
		MEAN				13.8
		STD				
MUTTON ISLAND	HERRING GULL	N				1
		MEAN				14.6
		STD				
CONE ISLAND	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	25			
		STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				12.5
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZO-p-DIOXIN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	(2)	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	(1)	ND	ND	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	5	
ISLAND	CRESTED	MEAN	(3)		12.4	
	CORMORANT	STD			6.0663	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	1	1
STREET SPIT		MEAN	(1)	(1)	ND	(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			ND	(0.2)
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	6			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZO-p-DIOXIN

NIAGARA RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	(2)	(1)	(1)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR 89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	3	ND	(2)	(0.2)
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	(2)	(1)	1.7
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	5			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	3	(2)	ND	(0.2)
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZO-p-DIOXIN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			(1)	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(1)	(2)	(1)	(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			(2)	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			(2)	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				(0.2)
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	(2)	(3)	(2)	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		(1)		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZO-p-DIOXIN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	4			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		(1)		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(1)	(2)	(1)	(0.6)
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	4			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	3	(1)	ND	(0.4)
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	(1)	(1)	(1)	(0.2)
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZO-p-DIOXIN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				(0.9)
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				(0.1)
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	(1)	(2)	(1)	ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				(0.4)
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				(0.1)
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			(1)	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				(0.7)
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	(2)	(1)	1.4
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	5			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				1.3
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				(0.6)
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	8			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				(0.6)
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZO-p-DIOXIN

ST. LAWRENCE RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(4)	(3)	(5)	1.3
		STD				

LAKE ONTARIO			YEAR 89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	(4)	(2)	(6)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	1	0	5	
ISLAND	CRESTED	MEAN	8		27.4	
	CORMORANT	STD			16.8612	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	1	1
STREET SPIT		MEAN	(5)	(3)	(6)	(0.2)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			(7)	ND
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	11			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZO-p-DIOXIN

NIAGARA RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	(4)	(2)	(5)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR 89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	(4)	(3)	(7)	(0.1)
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(5)	(2)	(5)	2.0
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	8			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	6	(4)	(6)	2.3
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZO-p-DIOXIN

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			(6)	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(3)	(3)	(3)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			(3)	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			(3)	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	8	(3)	8	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			(4)	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		(3)		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZO-p-DIOXIN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	8			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		(2)		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	(4)	(4)	3.3i
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	13			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	(4)	(1)	(2)	(0.1)
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	(4)	(2)	(3)	(0.2)
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZO-p-DIOXIN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				10.5
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				(0.1)
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	(4)	(3)	(5)	ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				7.0
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				(0.1)
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			(7)	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				4.5i
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(3)	(3)	(5)	(0.4)
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	8			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				5.5
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				6.4
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	21			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				5.3
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZO-p-DIOXIN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(5)	(5)	(5)	(0.4)
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	11	ND	(8)	25.1
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	1	0	5	
ISLAND	CRESTED	MEAN	13		25.2	
	CORMORANT	STD			13.1985	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	1	1
STREET SPIT		MEAN	8	(6)	(8)	5.2
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			(7)	(0.1)
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	12			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZO-p-DIOXIN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	(7)	ND	(6)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	8	(4)	(11)	12.1
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	17	(7)	12	4.1
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	11			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	13	(7)	(10)	15.3i
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZO-p-DIOXIN

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			(7)	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(5)	ND	ND	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			(5)	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			(6)	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				(0.1)
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	42	(8)	19	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			(12)	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		(6)		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZO-p-DIOXIN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	(4)			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		(2)		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	(4)	(6)	9.7
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	16			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	9	(8)	ND	(0.1)
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	8	13	(9)	21.9
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZO-p-DIOXIN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				11.7
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				3.0
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	(5)	(7)	(7)	ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				4.8
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				2.9
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			(9)	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				9.9
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(4)	(6)	(6)	(0.1)
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	10			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				12.7
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				18.3
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	22			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				9.8
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	1	(1)	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	1	ND	(1)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	1	0	5	
ISLAND	CRESTED	MEAN	(1)		0.7	
	CORMORANT	STD			0.2739	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	1	1
STREET SPIT		MEAN	1	(1)	ND	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			2	1.0
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	(1)			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	1	(1)	(1)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR 89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	1	ND	ND	0.9
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	2	(1)	(1)	4.2
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	ND			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	1	(1)	(1)	1.6
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	1	(1)	(1)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			3	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			(1)	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.9
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	4	5	4	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			ND	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		ND		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	ND			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		(1)		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	1	(1)	2	0.5
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	2			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	2	3	3	4.4
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	2	2	2	2.5
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

2378-TETRACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.8
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.7
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	2	(1)	(1)	0.9
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				1.6
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			(1)	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	2	2	(1)	3.6
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	(1)			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				2.1
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				2.5
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	2			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378/12348-PENTACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	0	0	1	1
		MEAN			ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	1	1
		MEAN			ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	0	0	0	
		MEAN				
		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		0		
		MEAN				
		STD				
LESLIE STREET SPIT	HERRING GULL	N	0	0	1	1
		MEAN			ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
	RING-BILLED GULL	N	0			
		MEAN				
		STD				
HAMILTON HARBOUR	HERRING GULL	N	0		0	1
		MEAN				ND
		STD				
	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378/12348-PENTACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	0	0	1	1
RIVER		MEAN			ND	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	0	0	1	1
COLBORNE,		MEAN			ND	ND
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	0	0	1	1
ISLAND		MEAN			ND	1.3
		STD				
EAST SISTER	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	0	0	1	1
ISLAND		MEAN			ND	(0.1)
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378/12348-PENTACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	0	0	1	1
ISLAND		MEAN			ND	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	0	0	1	0
SHELTER		MEAN			(1)	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378/12348-PENTACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	1	1
ISLAND		MEAN			ND	ND
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	1	1
		MEAN			ND	0.3
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	1	1
ISLAND,		MEAN			ND	ND
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12378/12348-PENTACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	1	1
		MEAN			ND	ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			0	
ALMOS SHOAL		MEAN				
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				(0.2)
ISLAND		STD				
GRANITE	HERRING GULL	N	0	0	1	1
ISLAND		MEAN			ND	ND
		STD				
GRAVEL	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				ND
		STD				
CONE ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12489/23467-PENTACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	0	0	0	
		MEAN				
		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		0		
		MEAN				
		STD				
LESLIE STREET SPIT	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
	RING-BILLED GULL	N	0			
		MEAN				
		STD				
HAMILTON HARBOUR	HERRING GULL	N	0		0	0
		MEAN				
		STD				
	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12489/23467-PENTACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	0	0	1	0
RIVER		MEAN			ND	
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	0	0	1	0
COLBORNE,		MEAN			ND	
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
EAST SISTER	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12489/23467-PENTACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				0
SHOAL		MEAN				
		STD				
CHANNEL	HERRING GULL	N	0	0	1	0
SHELTER		MEAN			4	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12489/23467-PENTACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	1	0
ISLAND,		MEAN			ND	
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

12489/23467-PENTACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				0
		MEAN				
		STD				
CHENE ISLAND	HERRING GULL	N				0
		MEAN				
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
MARATHON	HERRING GULL	N				0
		MEAN				
		STD				
LEADMAN	HERRING GULL	N				0
ISLANDS		MEAN				
		STD				
WEST OF	HERRING GULL	N			0	
ALMOS SHOAL		MEAN				
		STD				
LITTLE	HERRING GULL	N				0
TRAVERSE		MEAN				
ISLAND		STD				
LAKE	HERRING GULL	N				0
LINDEN/TORCH		MEAN				
ISLAND		STD				
GRANITE	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
GRAVEL	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				0
ISLAND		MEAN				
		STD				
MUTTON	HERRING GULL	N				0
ISLAND		MEAN				
		STD				
CONE ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

23478-PENTACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	7	7	5	7.2
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	9	7	7	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	1	0	5	
ISLAND	CRESTED	MEAN	14		29.2	
	CORMORANT	STD			8.8148	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	0	1
STREET SPIT		MEAN	6	5		3.4
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			3	10.9
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	21			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

23478-PENTACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	6	4	5	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	7	4	5	7.4
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	8	8	8	16.1
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	14			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	4	4	4	4.6
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

23478-PENTACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			3	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	8	10	6	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			15	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			12	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				25.5
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	22	28	16	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			7	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		6		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

23478-PENTACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	20			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		11		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	7	10	6	15.2
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	12			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	13	15	14	28.4
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	10	9	11	15.9
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

23478-PENTACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				16.7
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				8.5
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	13	10	10	19.3
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				8.8
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			3	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				11.9
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	1	9	1
ISLAND		MEAN	14	10		20.5
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	11			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				9.6
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				7.0
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	8			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				6.8
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123469/123689-HEXACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY STRACHAN ISLAND	SPECIES HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	1	1
		MEAN			ND	ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
PIGEON ISLAND	DOUBLE-CRESTED CORMORANT	N	0	0	0	
		MEAN				
		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE GALLOO ISLAND	DOUBLE-CRESTED CORMORANT	N		0		
		MEAN				
		STD				
LESLIE STREET SPIT	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
	RING-BILLED GULL	N	0			
		MEAN				
		STD				
HAMILTON HARBOUR	HERRING GULL	N	0		0	1
		MEAN				0.7
		STD				
	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123469/123689-HEXACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	0	0	1	1
RIVER		MEAN			ND	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	0	0	1	1
COLBORNE,		MEAN			ND	(0.1)
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
EAST SISTER	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123469/123689-HEXACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	0	0	1	1
ISLAND		MEAN			ND	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.8
		STD				
CHANNEL	HERRING GULL	N	0	0	1	0
SHELTER		MEAN			(3)	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123469/123689-HEXACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	1	1
		MEAN			ND	1.9
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	1	0
ISLAND,		MEAN			ND	
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123469/123689-HEXACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				0
		MEAN				
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.5
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	1	1
		MEAN			ND	0.7
		STD				
MARATHON	HERRING GULL	N				0
		MEAN				
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			0	
ALMOS SHOAL		MEAN				
		STD				
LITTLE	HERRING GULL	N				0
TRAVERSE		MEAN				
ISLAND		STD				
LAKE	HERRING GULL	N				0
LINDEN/TORCH		MEAN				
ISLAND		STD				
GRANITE	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
GRAVEL	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				0
ISLAND		MEAN				
		STD				
MUTTON	HERRING GULL	N				0
ISLAND		MEAN				
		STD				
CONE ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	4	ND	2.2
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	4	5	6	1.1
		STD				
	BLACK-	N	0			-
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	1	0	5	
ISLAND	CRESTED	MEAN	5		10.4	
	CORMORANT	STD			3.3615	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	1	1
STREET SPIT		MEAN	4	(3)	4	(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			ND	1.1
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	7			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	3	(2)	(2)	(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	(2)	ND	(2)	(0.1)
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	ND	ND	(1)	0.8
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	(2)			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	ND	(1)	1.1
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			(2)	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(1)	(2)	(1)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			(3)	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			(3)	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.8
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	7	6	5	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			(1)	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		(2)		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	(3)			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		(2)		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	(2)	(2)	1.6
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	(2)			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	3	(1)	(3)	(0.4)
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	(2)	(2)	(2)	0.6
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123478-HEXACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				2.8
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.5
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	3	(2)	(3)	0.7
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				1.6
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			(3)	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				3.1
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	3	(2)	(1)	2.2
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	5			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				1.2
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.7
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	4			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				0.9
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	(3)	ND	2.2
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	5	5	6	1.9
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	1	0	5	
ISLAND	CRESTED	MEAN	(2)		4.0	
	CORMORANT	STD			1.2247	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	1	1
STREET SPIT		MEAN	4	(3)	(3)	(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			ND	0.7
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	4			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	(2)	(2)	(2)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	(2)	(1)	(2)	(0.1)
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	(1)	(2)	2.3
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	(1)			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	(2)	(2)	1.5
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			(2)	
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	(2)	(2)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			5	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			6	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				1.9
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	9	8	8	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			(1)	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		(3)		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	(2)			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		4		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	3	(3)	(3)	2.5
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	(2)			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	4	(3)	5	5.6
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	(2)	(3)	(3)	2.1
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123678-HEXACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				5.0
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.6
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	4	(3)	(3)	1.5
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				2.4
		STD				
LEADMAN ISLANDS	HERRING GULL	N				1
		MEAN				ND
		STD				
WEST OF ALMOS SHOAL	HERRING GULL	N			1	
		MEAN			(3)	
		STD				
LITTLE TRAVERSE ISLAND	HERRING GULL	N				1
		MEAN				1.7
		STD				
LAKE LINDEN/TORCH ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
GRANITE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	4	(3)	(3)	3.4
		STD				
GRAVEL ISLAND	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	(3)			
		STD				
PAPOOSE ISLAND	HERRING GULL	N				1
		MEAN				2.3
		STD				
MUTTON ISLAND	HERRING GULL	N				1
		MEAN				1.7
		STD				
CONE ISLAND	DOUBLE-CRESTED CORMORANT	N	1			
		MEAN	(3)			
		STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				1.8
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				(0.1)
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	5	
ISLAND	CRESTED	MEAN			0.5	
	CORMORANT	STD			0.0000	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	0	0	0	1
STREET SPIT		MEAN				(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		0	1
HARBOUR		MEAN				0.7
		STD				
	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	0	0	0	1
RIVER		MEAN				ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	0	0	0	1
COLBORNE,		MEAN				(0.1)
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				0.5
		STD				
EAST SISTER	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				1.0
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				0.8
		STD				
CHANNEL	HERRING GULL	N	0	0	0	0
SHELTER		MEAN				
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	0	0
ISLAND		MEAN				
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				1.9
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	0	1
ISLAND,		MEAN				0.5
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

123789-HEXACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				1.5
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				0.5
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	0	1
		MEAN				0.7
		STD				
MARATHON	HERRING GULL	N				0
		MEAN				
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			0	
ALMOS SHOAL		MEAN				
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				2.3
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				3.1
		STD				
GRAVEL	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				0
ISLAND		MEAN				
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				0.7
		STD				
CONE ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

124689-HEXACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	0	
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	0	0	1	0
STREET SPIT		MEAN			ND	
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		0	0
HARBOUR		MEAN				
		STD				
	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

124689-HEXACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	0	0	1	0
RIVER		MEAN			ND	
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR 89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	0	0	1	0
COLBORNE,		MEAN			ND	
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
EAST SISTER	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

124689-HEXACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY WALPOLE ISLAND	SPECIES BLACK-CROWNED NIGHT-HERON	N				0
		MEAN				
		STD				
	FORSTERS TERN	N				0
		MEAN				
		STD				
ST. CLAIR RIVER	HERRING GULL	N			0	
		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY ISLAND	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
MANITOBA REEF	HERRING GULL	N			0	
		MEAN				
		STD				
LITTLE SADDLEBAG ISLAND	HERRING GULL	N			0	
		MEAN				
		STD				
ST. MARTIN SHOAL	HERRING GULL	N				0
		MEAN				
		STD				
CHANNEL SHELTER ISLAND	HERRING GULL	N	0	0	1	0
		MEAN			(3)	
		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK, SEVERN SOUND	COMMON TERN	N			0	
		MEAN				
		STD				
TURTLE ROCK	HERRING GULL	N			0	
		MEAN				
		STD				
SOUTH WATCHER ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
SNAKE ISLAND	HERRING GULL	N		0		
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

124689-HEXACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	1	0
ISLAND		MEAN			ND	
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	1	0
ISLAND,		MEAN			ND	
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

124689-HEXACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				0
		MEAN				
		STD				
CHENE ISLAND	HERRING GULL	N				0
		MEAN				
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
MARATHON	HERRING GULL	N				0
		MEAN				
		STD				
LEADMAN ISLANDS	HERRING GULL	N				0
		MEAN				
		STD				
WEST OF ALMOS SHOAL	HERRING GULL	N			0	
		MEAN				
		STD				
LITTLE TRAVERSE ISLAND	HERRING GULL	N				0
		MEAN				
		STD				
LAKE LINDEN/TORCH ISLAND	HERRING GULL	N				0
		MEAN				
		STD				
GRANITE ISLAND	HERRING GULL	N	0	0	1	0
		MEAN			ND	
		STD				
GRAVEL ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
PAPOOSE ISLAND	HERRING GULL	N				0
		MEAN				
		STD				
MUTTON ISLAND	HERRING GULL	N				0
		MEAN				
		STD				
CONE ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
KNIFE ISLAND	HERRING GULL	N				0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

234678-HEXACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(1)	(3)	ND	ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	1	1	1	1
		MEAN	(1)	(2)	(2)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	1	0	5	
ISLAND	CRESTED	MEAN	(3)		2.6	
	CORMORANT	STD			0.8944	
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	1	1	1	1
STREET SPIT		MEAN	3	(1)	(2)	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		1	1
HARBOUR		MEAN			ND	ND
		STD				
	DOUBLE-	N	1			
	CRESTED	MEAN	4			
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

234678-HEXACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	1	1	1	1
RIVER		MEAN	(2)	ND	ND	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	1	1	1	1
COLBORNE,		MEAN	(2)	ND	(2)	ND
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	1	1	1	0
ISLAND		MEAN	(1)	ND	(1)	
		STD				
EAST SISTER	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	(1)			
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(2)	ND	ND	ND
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

234678-HEXACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			1	
RIVER		MEAN			ND	
		STD				

LAKE HURON			YEAR			
			89	90	91	92
CHANTRY	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(1)	(1)	ND	ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			1	
REEF		MEAN			(3)	
		STD				
LITTLE	HERRING GULL	N			1	
SADDLEBAG		MEAN			(2)	
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	1	1	1	0
SHELTER		MEAN	3	4	(3)	
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			1	
ROCK		MEAN			(1)	
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		1		
ISLAND		MEAN		(1)		
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

234678-HEXACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	1			
ISLANDS	CRESTED	MEAN	(2)			
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		1		
ISLAND		MEAN		4		
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	1	1	1	1
ISLAND		MEAN	(1)	(3)	(2)	ND
		STD				
WEST ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	(2)			
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	1	1	1	0
		MEAN	3	(1)	(3)	
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	1	1	1	1
ISLAND,		MEAN	(1)	(2)	(1)	ND
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

234678-HEXACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				0.6
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	1	1	1	1
		MEAN	(2)	(1)	(2)	ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			1	
ALMOS SHOAL		MEAN			(2)	
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	1	1	1	0
ISLAND		MEAN	(2)	(1)	(1)	
		STD				
GRAVEL	DOUBLE-	N	1			
ISLAND	CRESTED	MEAN	(2)			
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				1.3
		STD				
MUTTON	HERRING GULL	N				0
ISLAND		MEAN				
		STD				
CONE ISLAND	DOUBLE-	N	1			
	CRESTED	MEAN	(2)			
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	0	
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	0	0	0	1
STREET SPIT		MEAN				(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		0	1
HARBOUR		MEAN				(0.1)
		STD				
	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA RIVER	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT COLBORNE, LIGHTHOUSE	HERRING GULL	N	0	0	0	1
		MEAN				(0.1)
		STD				
MIDDLE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				(0.1)
		STD				
EAST SISTER ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			0
		MEAN				
		STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				(0.1)
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	0	0	0	0
SHELTER		MEAN				
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				1.6
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				(0.1)
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	0	1
ISLAND,		MEAN				(0.1)
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234678-HEPTACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				1.2
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				3.9
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				18.1
		STD				
WEST OF	HERRING GULL	N			0	
ALMOS SHOAL		MEAN				
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				1.0
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				46.0
ISLAND		STD				
GRANITE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				2.6
		STD				
GRAVEL	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				1
ISLAND		MEAN				(0.1)
		STD				
MUTTON	HERRING GULL	N				1
ISLAND		MEAN				7.8
		STD				
CONE ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				3.6
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234789-HEPTACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				ND
		STD				

LAKE ONTARIO			YEAR			
			89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	0	
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	0	0	0	1
STREET SPIT		MEAN				ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		0	1
HARBOUR		MEAN				ND
		STD				
	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234789-HEPTACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA RIVER	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT COLBORNE, LIGHTHOUSE	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
MIDDLE ISLAND	HERRING GULL	N	0	0	0	0
		MEAN				
		STD				
EAST SISTER ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			0
		MEAN				
		STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234789-HEPTACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
WALPOLE	BLACK-	N				0
ISLAND	CROWNED	MEAN				
	NIGHT-HERON	STD				
	FORSTERS	N				0
	TERN	MEAN				
		STD				
ST. CLAIR	HERRING GULL	N			0	
RIVER		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
MANITOBA	HERRING GULL	N			0	
REEF		MEAN				
		STD				
LITTLE	HERRING GULL	N			0	
SADDLEBAG		MEAN				
ISLAND		STD				
ST. MARTIN	HERRING GULL	N				1
SHOAL		MEAN				ND
		STD				
CHANNEL	HERRING GULL	N	0	0	0	0
SHELTER		MEAN				
ISLAND		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK,	COMMON TERN	N			0	
SEVERN SOUND		MEAN				
		STD				
TURTLE	HERRING GULL	N			0	
ROCK		MEAN				
		STD				
SOUTH	CASPIAN TERN	N			0	
WATCHER		MEAN				
ISLAND		STD				
SNAKE	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234789-HEPTACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	0	0
ISLAND		MEAN				
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	0	0
		MEAN				
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	0	1
ISLAND,		MEAN				ND
GREEN BAY		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

1234789-HEPTACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	0	1
		MEAN				(0.1)
		STD				
MARATHON	HERRING GULL	N				0
		MEAN				
		STD				
LEADMAN	HERRING GULL	N				1
ISLANDS		MEAN				ND
		STD				
WEST OF	HERRING GULL	N			0	
ALMOS SHOAL		MEAN				
		STD				
LITTLE	HERRING GULL	N				1
TRAVERSE		MEAN				ND
ISLAND		STD				
LAKE	HERRING GULL	N				1
LINDEN/TORCH		MEAN				ND
ISLAND		STD				
GRANITE	HERRING GULL	N	0	0	0	0
ISLAND		MEAN				
		STD				
GRAVEL	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
PAPOOSE	HERRING GULL	N				0
ISLAND		MEAN				
		STD				
MUTTON	HERRING GULL	N				0
ISLAND		MEAN				
		STD				
CONE ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
KNIFE ISLAND	HERRING GULL	N				0
		MEAN				
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZOFURAN

ST. LAWRENCE RIVER			YEAR 89	90	91	92
COLONY	SPECIES					
STRACHAN	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				ND
		STD				

LAKE ONTARIO			YEAR 89	90	91	92
SNAKE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
PIGEON	DOUBLE-	N	0	0	0	
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
LITTLE	DOUBLE-	N		0		
GALLOO	CRESTED	MEAN				
ISLAND	CORMORANT	STD				
LESLIE	HERRING GULL	N	0	0	0	1
STREET SPIT		MEAN				ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	RING-BILLED	N	0			
	GULL	MEAN				
		STD				
HAMILTON	HERRING GULL	N	0		0	1
HARBOUR		MEAN				(0.1)
		STD				
	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				
	CASPIAN TERN	N	0		0	
		MEAN				
		STD				
	COMMON TERN	N	0		0	0
		MEAN				
		STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in µg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZOFURAN

NIAGARA RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
NIAGARA	HERRING GULL	N	0	0	0	1
RIVER		MEAN				ND
		STD				
	BLACK-	N	0			
	CROWNED	MEAN				
	NIGHT-HERON	STD				

LAKE ERIE			YEAR			
			89	90	91	92
COLONY	SPECIES					
PORT	HERRING GULL	N	0	0	0	1
COLBORNE,		MEAN				ND
LIGHTHOUSE		STD				
MIDDLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				(0.1)
		STD				
EAST SISTER	DOUBLE-	N	0			
ISLAND	CRESTED	MEAN				
	CORMORANT	STD				
	BLACK-	N	0			0
	CROWNED	MEAN				
	NIGHT-HERON	STD				
	GREAT EGRET	N				0
		MEAN				
		STD				

DETROIT RIVER			YEAR			
			89	90	91	92
COLONY	SPECIES					
FIGHTING	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				ND
		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				

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TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZOFURAN

ST. CLAIR RIVER			YEAR 89	90	91	92
COLONY WALPOLE ISLAND	SPECIES BLACK-CROWNED NIGHT-HERON	N				0
		MEAN				
		STD				
	FORSTERS TERN	N				0
		MEAN				
		STD				
ST. CLAIR RIVER	HERRING GULL	N			0	
		MEAN				
		STD				

LAKE HURON			YEAR 89	90	91	92
CHANTRY ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				(0.1)
		STD				
	BLACK-CROWNED NIGHT-HERON	N	0			
		MEAN				
		STD				
MANITOBA REEF	HERRING GULL	N			0	
		MEAN				
		STD				
LITTLE SADDLEBAG ISLAND	HERRING GULL	N			0	
		MEAN				
		STD				
ST. MARTIN SHOAL	HERRING GULL	N				1
		MEAN				ND
		STD				
CHANNEL SHELTER ISLAND	HERRING GULL	N	0	0	0	0
		MEAN				
		STD				
	CASPIAN TERN	N			0	
		MEAN				
		STD				
FLAT ROCK, SEVERN SOUND	COMMON TERN	N			0	
		MEAN				
		STD				
TURTLE ROCK	HERRING GULL	N			0	
		MEAN				
		STD				
SOUTH WATCHER ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
SNAKE ISLAND	HERRING GULL	N		0		
		MEAN				
		STD				

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TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZOFURAN

LAKE HURON			YEAR			
			89	90	91	92
COLONY	SPECIES					
SOUTH	CASPIAN TERN	N			0	
LIMESTONE		MEAN				
ISLAND		STD				
	COMMON TERN	N			0	
		MEAN				
		STD				
BLACKBILL	DOUBLE-	N	0			
ISLANDS	CRESTED	MEAN				
	CORMORANT	STD				
HALFMOON	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
WEST MARY	HERRING GULL	N		0		
ISLAND		MEAN				
		STD				
THE COUSINS	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
DOUBLE	HERRING GULL	N	0	0	0	1
ISLAND		MEAN				(0.1)
		STD				
WEST ISLAND	DOUBLE-	N	0			
	CRESTED	MEAN				
	CORMORANT	STD				

LAKE MICHIGAN			YEAR			
			89	90	91	92
COLONY	SPECIES					
ISLE AUX	CASPIAN TERN	N			0	
GALETS		MEAN				
		STD				
HAT ISLAND	CASPIAN TERN	N			0	
		MEAN				
		STD				
GULL ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				(0.1)
		STD				
GRAVELLY	CASPIAN TERN	N			0	
ISLAND		MEAN				
		STD				
BIG SISTER	HERRING GULL	N	0	0	0	1
ISLAND,		MEAN				ND
GREEN BAY		STD				

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TABLE 11. CONTAMINANT DATA SUMMARIZED BY COMPOUND ANALYZED*

OCTACHLORODIBENZOFURAN

LAKE SUPERIOR			YEAR			
			89	90	91	92
COLONY	SPECIES					
GULL ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
CHENE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
AGAWA ROCK	HERRING GULL	N	0	0	0	1
		MEAN				ND
		STD				
MARATHON	HERRING GULL	N				1
		MEAN				ND
		STD				
LEADMAN ISLANDS	HERRING GULL	N				1
		MEAN				ND
		STD				
WEST OF ALMOS SHOAL	HERRING GULL	N			0	
		MEAN				
		STD				
LITTLE TRAVERSE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
LAKE LINDEN/TORCH ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				
GRANITE ISLAND	HERRING GULL	N	0	0	0	1
		MEAN				(0.1)
		STD				
GRAVEL ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
PAPOOSE ISLAND	HERRING GULL	N				1
		MEAN				(0.1)
		STD				
MUTTON ISLAND	HERRING GULL	N				1
		MEAN				(0.1)
		STD				
CONE ISLAND	DOUBLE-CRESTED CORMORANT	N	0			
		MEAN				
		STD				
KNIFE ISLAND	HERRING GULL	N				1
		MEAN				ND
		STD				

* All units measured on wet weight basis. Dioxins and furans measured in pg/g; all others in μg/g. N=1 indicates pooled data; ND, not detected; (), trace amount - below the detection limit for sample; i, compound detected with incorrect ion ratio. See page 7 for methodology.

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