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## **Data on Insects Emerging from Natural and Developed Fish Habitats at the Campbell and Fraser River Estuaries, 1989**

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1991

## **Canadian Data Report of Fisheries and Aquatic Sciences 827**



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HABITATS AT THE CAMPBELL AND FRASER RIVER ESTUARIES, 1989

by

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Cat. No. F8 97-13/827E ISSN 0706-6465

Correct citation for this publication:

Whitehouse, T. R. 1991. Data on insects emerging from natural and developed fish habitats at the Campbell and Fraser River estuaries, 1989. Can. Data Rep. Fish. Aquat. Sci. 827: 85 p.

ABSTRACT

Whitehouse, T. R. 1991. Data on insects emerging from natural and developed fish habitats at the Campbell and Fraser River estuaries, 1989. Can. Data Rep. Fish. Aquat. Sci. 827: 85 p.

Data are presented on the abundance of emergent insects collected from natural and developed fish habitats at both the Campbell and Fraser River estuaries. Insects were collected with emergence traps from two regions within the Fraser River estuary and from one region in the Campbell River estuary. Emergent vegetation samples were also collected from both estuaries and data are presented on the species composition and biomass of these intertidal marsh plants.

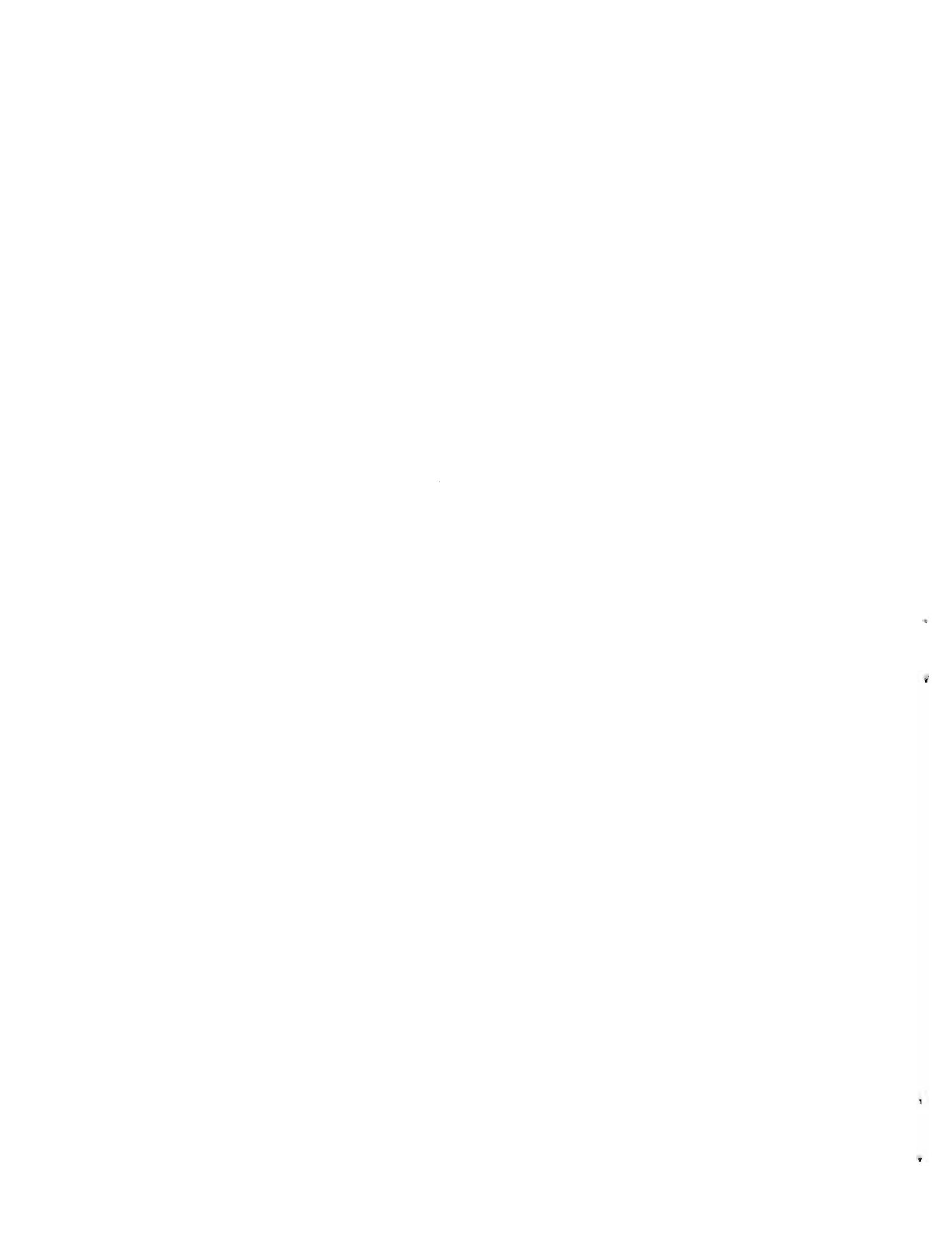
Key words: Campbell River Estuary, Fraser River Estuary, insect-emergence traps, marsh vegetation, habitat compensation, created habitat

RÉSUMÉ

Whitehouse, T. R. 1991. Data on insects emerging from natural and developed fish habitats at the Campbell and Fraser River estuaries, 1989. Can. Data Rep. Fish. Aquat. Sci. 827: 85 p.

On présente des données sur l'abondance des insectes émergents recueillies dans les habitats de poisson naturels et développés dans les estuaires de la rivière Campbell et du fleuve Fraser. Les insectes ont été collectés à l'aide de pièges d'émergence placés dans deux régions dans l'estuaire du Fraser et dans une région de l'estuaire dans la rivière Campbell. On a également recueilli des échantillons de végétation émergée des deux estuaires et on présente des données sur la composition des espèces et la biomasse de ces plantes de marais intertidaux.

Mots clés: Estuaire de la rivière Campbell, estuaire du fleuve Fraser, pièges d'émergence pour insectes, végétation des marais, compensation de l'habitat, habitat créé



## INTRODUCTION

Intertidal estuarine marshes provide important nursery habitat for several species of juvenile fish, both permanent and temporary residents. Functions include foraging and rearing areas, predator refugia, and saltwater acclimation areas. Pacific salmon (genus *Oncorhynchus*) undertake extensive directed annual migrations between the fresh and marine waters, with the estuary providing an interface between these two environments. Juvenile migrants utilize estuarine habitats on their seaward journey for varying periods of time, lasting from a few days to several months. The estuary plays a particularly important role for species which undertake an extended residency there (ie. chinook and chum salmon), as these species have developed a life history strategy which relies on specific components of the estuarine environment. As an example, invertebrate populations supported by estuarine marshes comprise an important component of the diet composition of fishes utilizing estuarine areas as rearing habitat.

The data documented in this report arise directly from the implementation of "no net loss" policy (DFO, 1986) as an attempt to quantify intact functional intertidal marsh habitat. This quantification will then aid in the assessment of newly created or restored compensation habitat. The approach taken here has been to examine the abundance of emergent insects, from both natural and created habitats, produced during periods of juvenile salmon residency in two British Columbia estuaries.

The work carried out within the Fraser River estuary examined habitat created as the result of two projects: 1) construction of highway bridge footings (Annacis Crossing Project) which destroyed an area of intertidal marsh and mudflats in 1985; 2) the dredging of an intertidal marsh and mudflat to create a marina/public market complex in 1987-88. Both projects involved the destruction and loss of productive fish habitat, with the concomitant creation of compensation habitat in an attempt to offset these losses. At the Campbell River estuary the created habitat examined was developed in 1982 on previously impacted intertidal marsh areas. Changes in log storage practices of an industrial leaseholder made this area available for restoration. Intertidal log-boom storage grounds were rehabilitated to intertidal island/marsh complexes.

## METHODS AND MATERIALS

### Insect Emergence Trapping

Insect emergence trapping was carried out using the Model DAY trap described by LeSage and Harrison (1979). The trap consisted of a four-sided pyramidal frame supporting a 202 $\mu\text{m}$  Nitex mesh sampling net. A 500 ml plastic sampling jar was secured in the apex of the sampling net using a heavy elastic band. Floatation for the trap was provided by attaching a string of four standard gillnet floats to each side of the base of the frame. Each trap sampled an area of 0.5 m<sup>2</sup>. The traps were anchored by using both an upright guide stake (2.5m x 1.2cm diameter steel rod) and an anchor stake and lanyard (0.7m x 1.2cm diameter steel rod and 3.5m of 7mm polypropylene cord). The anchoring points were on diagonal corners of the trap frame base. On one of anchoring points a 10cm length of 2.5cm I.D. PVC pipe was permanently fixed to the frame of the trap with a 40cm length of #2 ganging twine. This length of pipe acted as a loose fitting sleeve which allowed the trap to rise and fall with tidal or wave action. The upright guide stake was driven into the sediment approximately 50cm and then the guide sleeve was placed over the stake. On the corner of the trap frame diagonal to the sleeve the anchor stake and lanyard were affixed via the free end of the lanyard. The anchor stake was then driven into the sediment after fully extending the lanyard.

Emergence traps were usually deployed on the dropping tide just as the sites were dewatering. At each site from 3 to 7 traps were set. Three collection strategies were employed: sampling for a period of 24 hours (denoted in the tables as SET=24H); sampling based on tidal stage, ie. flooded versus dewatered marsh (denoted in the tables as SET=WET or DRY); and 3 hour intervals for a 24 hour period (denoted in the tables as SET=INW for intensive sampling flooded marsh, or IND for intensive sampling dry marsh). Trap collection procedures were those outlined in LeSage and Harrison (1979). Insects were killed by placing the sampling net with its catch in a 20 litre plastic pail, the bottom of which had been lined with 3-4 sheets of absorbent paper towelling dampened with ethyl acetate. The pail was then tightly sealed for 5 to 20 minutes. Captured insects were shaken down into the sampling jar and picked from the net, using forceps where necessary. Samples were labelled with date, site, and set type information and preserved with 100% isopropyl alcohol. Identification of the samples to the family level was conducted at the West Vancouver Laboratory using appropriate taxonomic keys (Chu, 1949; Borror and DeLong, 1964; Borror and White, 1970; Merritt and Cummins, 1984; Borror, DeLong and Triplehorn, 1981; McAlpine et al., 1981). A list of the taxa observed from both estuaries, and the variable codes defining these taxa in the data tables is given in Table 1. Descriptor variables from the data tables are defined in Table 2.

#### Marsh Plant Sampling

Emergent marsh vegetation from the insect sampling sites was collected once during the 1989 season. Plants were collected on May 25-26, 1989 at Campbell River, on August 18, 1989 at the Annacis Channel sites, and on August 16, 1989 from the Mitchell Island sites. At each site, following the removal of insect sampling nets from the trap frame, all plants within the base of the frame ( $0.5 \text{ m}^2$ ) were clipped and collected. Garden shears were used to cut all plant material greater than 0.5 cm in height. Plant material taller than 0.5 cm was collected to determine live above-ground emergent vegetation biomass and species composition, with a minimum of detrital material. Any detritus having been incidentally collected was removed from the plant samples. No attempt was made to measure detrital biomass. The samples were placed in black plastic bags and labelled with date and site information. In the laboratory, the samples were stored in a freezer at  $-20^\circ\text{C}$  until sorting and identification was carried out. Plants were identified to species, and sorted accordingly. Identifications were verified using Hitchcock and Cronquist (1981), and through herbarium reference collections at the West Vancouver Laboratory and at the University of British Columbia (collection of Dr. G. Bradfield). Plant samples were blotted dry of any moisture and weight was determined with an electronic balance (nearest 0.01g). The samples were then dried to constant weight in a radiant heat oven at  $100^\circ\text{C}$  for 48 hours. On removal from the drying oven the samples were then cooled in a vacuum desiccator for a period of 24 hours. Weights, to the nearest 0.01g, were measured with an electronic balance. A complete list of the plant species observed from both estuaries is given in Table 2.1.

#### Study Sites and Emergence Trapping Locations

##### Mitchell Island

The Mitchell Island study was initiated in April, 1989. The study site was a created marsh which had been planted in the spring of 1988 as compensation for habitat losses incurred at the site of the a public market and marina facility. Figures 1 and 3 document the locations of the market/marina development site and the compensation habitat on the North Arm of the Fraser River. Intertidal marsh and mudflats, as well as adjacent riparian and uplands were destroyed by dredging and filling during the market/marina site preparation and construction. Compensation measures for

these habitat losses were addressed through the creation of intertidal habitat 2.7 kms upstream from the public market/marina site. Dredge spoil from the marina site was barged to a vacated log storage site where it was off-loaded and graded to elevations suitable for establishment of intertidal marsh. The graded substrate was then planted with cores of marsh plants which had been salvaged from the intertidal marsh at the initial dredge site.

The north-eastern edge of the newly established compensation habitat was bordered by a small, approximately 50m<sup>2</sup>, intact remnant marsh. This site was sampled as a reference for the developing marsh and was denoted as MI1 during this study. Three sites for insect sampling were established within the new marsh during the spring of 1989, these sites were denoted as MI2, MI3, and MI4. Figure 6 details the location of the sampling sites at the created habitat on Mitchell Island. At the time of initial visual assessment of the site in mid-April, 1989 it was apparent that the survival of the planted vegetation cores varied throughout the new marsh. Core survival was assessed by visually examining cores for live above-ground vegetation. This qualitative visual inspection revealed areas within the marsh which had very low apparent core survival, ie. 0-2 of 10 cores with live, green, vegetative growth in April, 1989, through to areas with high core survival, ie. 7-10 of 10 cores with live growth in April, 1989. As there were marked differences in the success of the transplanted cores after the first year, the three sampling sites within the created marsh were selected to represent a range of the observed variation in vegetation density. A mudflat, initially planted in 1988 but exhibiting high core failure after one year, ie. no apparent live above-ground vegetation during initial assessment, was selected to examine the abundance of emergent insects in areas with low vegetative biomass, this site was denoted MI2. Site MI3 was established in an area where core survival after one year was high (90-100%), and site MI4 provided a comparison of insect abundance from an area of intermediate core survival after one year (40-60%). Data on the abundance and taxonomic composition of emergent insects sampled from April 27, 1989 to September 13, 1989 at these four sites at Mitchell Island area are presented in Table 3. In addition, plant species composition and biomass from these sites sampled on August 16, 1989 are reported in Tables 6-9. A complete description of the rationale and siting design criteria for the Mitchell Island compensation marsh project is documented by Williams (1985).

#### Annacis Channel

Investigations during 1989 represented the second season of sampling at Annacis Channel. Two reference sites (PIC and AN2) and a created habitat site (PBR) were sampled from May 14, 1989 to September 14, 1989. The reference sites PIC and AN2 were located 0.9 and 2.6 kms respectively, downstream from the created habitat. Figures 1 and 4 show the location of the Annacis Channel study sites. Previous results from insect and vegetation sampling have been reported elsewhere (Whitehouse et al., 1989). Harder (1988) has documented the Annacis Crossing Project. The Patrick Bay compensation habitat was created in 1985 as mitigation for habitat losses incurred as the result bridge construction over Annacis Channel. The project created 4400m<sup>2</sup> of intertidal habitat, 1350m<sup>2</sup> of which were classified as intertidal marsh (Harder, 1988). Sampling at Patrick Bay was carried out on the eastern shore of the embayment, on the remnant of Patrick Island (see Figure 7). Vegetation in the sampling area was relatively sparse compared to the reference sites. Tables 10-12 document the species composition and biomass of emergent marsh vegetation from all of the Annacis Channel sites. The abundance and taxonomic composition of insects sampled during 1989 are given in Table 4.

#### Campbell River

A single sampling trip was made to the Campbell River estuary during 1989. Emergence trapping was carried out at two created habitat sites (IS1

and IS3) and a single intact reference site (NUN), the site locations are shown in Figures 2 and 5. The Campbell River Project has been described by Brownlee et al. (1984). Sampling at IS1 was carried out within the created marsh on two spits forming an embayment on the north-eastern edge of the Island 1. The initial planting scheme for this area (described as Island 1, "Quadrat D" by Brownlee et al., 1984, Appendix 3) consisted of 4400 10cm<sup>2</sup> Carex sp. plugs planted at 1.0m intervals. At Island 3 (IS3) sampling was carried out mid-island in planted marsh which represented the lower boundary of a quadrat initially planted with 1600 10cm<sup>2</sup> plugs of *Juncus* sp. spaced at 0.5m intervals (Island 3, "Quadrat A" of Brownlee et al., 1985). At NUN, the reference site, sampling was conducted on the eastern edge of the island in a well developed sedge marsh which was the dominant vegetation community on the island. The results of insect sampling during 1988 are documented by Whitehouse et al. (1989). This report documents the abundance and taxonomic composition of emergent insects sampled from May 23 to 26, 1989, and marsh vegetation sampled on May 25 and 26, 1989, in Tables 5 and 13-15 respectively.

#### ACKNOWLEDGEMENTS

The West Vancouver Chamber of Commerce sponsored Job Development Project provided valuable assistance in the laboratory through the course of this study. Assistance was provided by several people: J. Elliot, S. Robinson, C. Maurice, and P. Boutcher. Assistance in collection of the samples was provided by J. Day. Dr. C.D. Levings reviewed the manuscript.

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Table 1. Variable codes for Fraser and Campbell River emergence samples, 1989.

MOLLUSCA		COLEOPTERA Cont.			
GASTROPODA		GAST			
ARTHROPODA			Elateridae		ELAT
INSECTA			Histeridae		HIST
COLLEMBOLA			Lathridiidae		LATH
Sminthuridae	SMIN		Salpingidae		SALP
ODONATA			Scolytidae		SCOL
Coenagrionidae	COEN		Staphylinidae		STAP
PLECOPTERA			DIPTERA		
Nemouridae	NEMO		Unidentified adult		DIAD
THYSANOPTERA			Cecidomyiidae		CECI
Thripidae	THRI		Ceratopogonidae	adult	CERA
HEMIPTERA				larvae	CERL
Heteroptera			Chironomidae	adult	CHIA
Lygaeidae	LYGA			larvae	CHIL
Saldidae	SALD			pupae	CHIP
Homoptera			Chloropidae		CHLR
Aphididae	APHI		Culicidae		CULI
Cercopidae	CERC		Dolichopodidae		DOLI
Cicadellidae	CICA		Empididae		EMPI
Delphacidae	DELP		Ephydriidae		EPHY
Psyllidae	PSYL		Muscidae	adult	MUSC
HYMENOPTERA				larvae	MUSL
Unidentified adult	HYAD		Mycetophilidae		MYCE
Braconidae	BRAC		Phoridae		PHOR
Cephidae	CEPH		Psychodidae		PSYC
Diapriidae	DIAP		Scatopsidae		SCAT
Encyrtidae	ENCY		Sciariidae		SCIA
Eulophidae	EULO		Sciomyzidae		SCMY
Eurytomidae	EURY		Sphaeroceridae		SPHA
Ichneumonidae	ICHN		Syrphidae		SYRP
Mymaridae	MYMA		Tipulidae		TIPU
Platygastridae	PLAT		TRICHOPTERA		
Pteromalidae	PTER		Hydropsychidae		HDPS
Scelionidae	SCEL		Hydroptilidae		HDTI
Trichogrammatidae	TRIC		Lepidostomatidae		LEPI
COLEOPTERA			Leptoceridae		LEPT
Carabidae	CARA		Polycentropodidae		POLY
Chrysomelidae	CHRY		LEPIDOPTERA		
Ciidae	CIID		Pieridae		PIER
Coccinellidae	COCC		ARACHNIDA		
Curculionidae	CURC		ARANEAE		ARAN
			ACARINA		ACAR
			CRUSTACEA		
			ISOPODA		ISOP

Table 2.0 Variable codes presented in Tables 3-5.

SAMPLE SITE	Site sampled - see Figures 1-7 for locations.
DATE SET	Date sample nets set.
TIME SET	Time sample nets set (HH:MM PST).
SAMPLE DATE	Date sample nets collected.
TIME OUT	Time sample nets collected (HH:MM PST).
SET LENGTH	Duration of set (HH:MM)
SET	Set Type: DRY = Site dewatered WET = Site flooded IND = Site dewatered intensive sampling INW = Site flooded intensive sampling 24H = 24 hour sampling interval NQ = Non-quantitative sample.
REP	Replicate trap number.
REPS	Total number of replicate traps set per site.
TOTAL	Total number of insects sampled per set.

Missing data denoted in Tables 3-5 as "."

Table 2.1 Intertidal marsh plants sampled from the Fraser and Campbell River estuaries, 1989.

<i>Equisetum arvense</i> L.	<i>Juncus articulatus</i> L.
<i>Equisetum fluviatile</i> L.	<i>Juncus balticus</i> Willd.
<i>Polygonum hydropiper</i> L.	<i>Juncus effusus</i> L.
<i>Ranunculus repens</i> L.	<i>Juncus ensifolius</i> Wikst.
<i>Ranunculus</i> sp.	<i>Juncus oxymeris</i> Engelm.
<i>Cardamine occidentalis</i> (Wats.) Howell	<i>Juncus tenuis</i> Willd.
<i>Potentilla pacifica</i> Howell	<i>Juncus</i> sp.
<i>Callitrichie</i> sp.	<i>Carex lyngbyei</i> Hornem.
<i>Lythrum salicaria</i> L.	<i>Eleocharis ovata</i> (Roth) R. & S.
<i>Lilaeopsis occidentalis</i> Coulter. & Rose	<i>Eleocharis palustris</i> L.
<i>Sium suave</i> Walt.	<i>Scirpus acutus</i> Muhl.
<i>Myosotis scorpioides</i> L.	<i>Scirpus americanus</i> Pers.
<i>Gratiola neglecta</i> Torr.	<i>Scirpus microcarpus</i> Presl.
<i>Limosella aquatica</i> L.	<i>Agrostis alba</i> L.
<i>Arnica amplexicaulis</i> Nutt.	<i>Deschampsia caespitosa</i> (L.) Beauv.
<i>Aster subspicatus</i> Nees.	<i>Phalaris arundinacea</i> L.
<i>Alisma plantago-aquatica</i> L.	<i>Sparganium angustifolium</i> Michx.
<i>Sagittaria latifolia</i> Willd.	<i>Lemna minor</i> L.
<i>Triglochin maritimum</i> L.	

Table 3. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no./0.5m<sup>2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	SET REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI1	27APR89	10:20	27APR89	20:50	10:30	DRY	1	4	27	0	0	0	0	0	0	0	0	0	0	
MI1	27APR89	10:20	27APR89	20:50	10:30	DRY	2	4	11	0	0	0	0	0	0	0	0	0	0	
MI1	27APR89	10:20	27APR89	20:50	10:30	DRY	3	4	4	0	0	0	0	0	0	0	0	0	0	
MI1	27APR89	10:20	27APR89	20:50	10:30	DRY	4	4	1	0	0	0	0	0	0	0	0	0	0	
MI1	27APR89	20:50	28APR89	11:25	14:35	WET	1	4	12	0	0	0	0	0	0	0	0	1	0	
MI1	27APR89	20:50	28APR89	11:25	14:35	WET	2	4	10	0	0	0	0	0	0	0	0	0	1	
MI1	27APR89	20:50	28APR89	11:25	14:35	WET	3	4	11	0	0	0	0	0	0	0	0	0	0	
MI1	27APR89	20:50	28APR89	11:25	14:35	WET	4	4	7	0	0	0	0	0	0	0	0	1	0	
MI1	03MAY89	6:00	03MAY89	15:50	9:50	DRY	1	4	35	0	0	0	0	0	0	0	0	9	0	
MI1	03MAY89	6:00	03MAY89	15:50	9:50	DRY	2	4	34	0	0	0	0	1	0	0	0	3	1	
MI1	03MAY89	6:00	03MAY89	15:50	9:50	DRY	3	4	33	0	0	1	0	0	0	0	0	2	0	
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12		
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9		
0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	53		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	41		

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE SET	TIME DATE	SET OUT LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC	
MI1	03MAY89	6:00	03MAY89	15:50	9:50 DRY	4	4	56	0	0	0	0	0	0	0	0	5	2	0	4	
MI1	03MAY89	16:05	03MAY89	18:50	2:45 WET	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	
MI1	03MAY89	16:05	03MAY89	18:50	2:45 WET	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	
MI1	03MAY89	16:05	03MAY89	18:50	2:45 WET	3	4	0	0	0	0	0	0	0	0	0	0	1	0	0	
MI1	03MAY89	16:05	03MAY89	18:50	2:45 WET	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	
MI1	16MAY89	7:00	16MAY89	15:20	8:20 DRY	1	4	55	0	0	17	0	0	0	0	0	0	2	1	2	6
MI1	16MAY89	7:00	16MAY89	15:20	8:20 DRY	2	4	49	0	0	2	0	0	0	0	0	0	0	0	0	2
MI1	16MAY89	7:00	16MAY89	15:20	8:20 DRY	3	4	20	0	0	3	0	0	0	0	0	0	0	0	0	0
MI1	16MAY89	7:00	16MAY89	15:20	8:20 DRY	4	4	15	0	0	1	0	0	0	0	0	0	0	0	0	4
MI1	16MAY89	15:50	17MAY89	7:40	15:50 WET	1	4	8	0	0	36	0	0	0	0	0	0	0	0	0	0
MI1	16MAY89	15:50	17MAY89	7:40	15:50 WET	2	4	10	0	0	11	0	0	0	0	0	0	0	1	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																					
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																					
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	27	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	45	
0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	24	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI1	16MAY89	15:50	17MAY89	7:40	15:50	WET	3	4	6	0	0	10	0	0	0	0	0	2	0	0
MI1	16MAY89	15:50	17MAY89	7:40	15:50	WET	4	4	8	0	0	5	0	0	0	0	0	0	0	0
MI1	31MAY89	12:15	01JUN89	6:15	18:00	WET	1	4	50	0	0	9	1	0	0	0	0	1	0	0
MI1	31MAY89	12:15	01JUN89	6:15	18:00	WET	2	4	27	0	0	22	0	0	0	0	0	0	0	0
MI1	31MAY89	12:15	01JUN89	6:15	18:00	WET	3	4	45	0	0	37	0	1	0	0	0	1	0	2
MI1	31MAY89	12:15	01JUN89	6:15	18:00	WET	4	4	174	0	0	5	0	0	0	0	0	6	0	13
MI1	01JUN89	7:00	01JUN89	15:20	8:20	DRY	1	4	91	0	0	0	0	0	0	0	0	3	0	1
MI1	01JUN89	7:00	01JUN89	15:20	8:20	DRY	2	4	131	0	0	0	0	0	0	0	0	1	0	6
MI1	01JUN89	7:00	01JUN89	15:20	8:20	DRY	3	4	94	0	0	20	0	0	0	0	0	0	0	4
MI1	01JUN89	7:00	01JUN89	15:20	8:20	DRY	4	4	560	0	0	17	0	0	1	0	0	6	1	2
MI1	01JUN89	16:05	02JUN89	5:50	13:45	WET	1	4	2	0	0	2	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	19	
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	64	
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	91
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	202
0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	100
0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	142
0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	121
0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	1	0	0	602
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE SET	TIME DATE	SET OUT LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI1	01JUN89	16:05	02JUN89	5:50	13:45 WET	2	4	3	0	0	1	0	0	0	0	0	0	0	0	0
MI1	01JUN89	16:05	02JUN89	5:50	13:45 WET	3	4	7	0	0	0	0	0	0	0	0	0	0	1	0
MI1	01JUN89	16:05	02JUN89	5:50	13:45 WET	4	4	12	0	0	6	0	0	0	0	0	0	0	0	0
MI1	13JUN89	13:45	14JUN89	4:40	14:55 WET	1	4	56	0	0	1	0	0	0	0	0	0	0	0	0
MI1	13JUN89	13:45	14JUN89	4:40	14:55 WET	2	4	29	0	0	0	0	0	3	0	0	0	0	0	0
MI1	13JUN89	13:45	14JUN89	4:40	14:55 WET	3	4	113	0	0	3	0	0	0	0	0	0	0	3	0
MI1	13JUN89	13:45	14JUN89	4:40	14:55 WET	4	4	39	0	0	1	0	0	0	0	0	0	1	0	0
MI1	14JUN89	5:00	14JUN89	14:00	9:00 DRY	1	4	95	0	0	1	0	0	0	0	0	0	1	5	0
MI1	14JUN89	5:00	14JUN89	14:00	9:00 DRY	2	4	60	0	0	1	0	0	1	0	0	0	0	4	0
MI1	14JUN89	5:00	14JUN89	14:00	9:00 DRY	3	4	120	0	0	0	0	0	0	0	0	0	2	19	0
MI1	14JUN89	5:00	14JUN89	14:00	9:00 DRY	4	4	118	0	0	2	0	0	2	0	0	2	0	27	1
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	1	0	0	0	5	0	3	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119
0	0	0	0	0	18	0	2	0	0	0	0	0	0	0	0	0	0	0	0	88
0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180
0	0	0	0	0	17	0	2	0	0	0	0	0	0	0	0	0	2	0	0	174
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	21
0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131
0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	75
0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	18	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	88
0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180
0	0	0	0	17	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	174

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI1	14JUN89	14:50	14JUN89	18:00	3:10	INW	1	4	2	0	0	1	0	0	0	0	0	0	0	
MI1	14JUN89	14:50	14JUN89	18:00	3:10	INW	2	4	5	0	0	2	0	0	0	0	0	0	0	
MI1	14JUN89	14:50	14JUN89	18:00	3:10	INW	3	4	10	0	0	2	0	0	1	0	0	0	0	
MI1	14JUN89	14:50	14JUN89	18:00	3:10	INW	4	4	32	0	0	1	0	0	0	0	0	0	0	
MI1	14JUN89	18:00	14JUN89	21:05	3:05	INW	1	4	2	0	0	0	0	0	0	0	0	0	2	
MI1	14JUN89	18:00	14JUN89	21:05	3:05	INW	2	4	1	0	0	0	0	0	0	0	0	0	0	
MI1	14JUN89	18:00	14JUN89	21:05	3:05	INW	3	4	3	0	0	0	0	0	0	0	0	0	0	
MI1	14JUN89	18:00	14JUN89	21:05	3:05	INW	4	4	2	0	0	0	0	0	0	0	0	0	0	
MI1	14JUN89	21:05	15JUN89	4:00	6:55	INW	1	4	0	0	0	0	0	0	0	0	0	0	0	
MI1	14JUN89	21:05	15JUN89	4:00	6:55	INW	2	4	0	0	0	1	0	0	0	0	0	0	0	
MI1	14JUN89	21:05	15JUN89	4:00	6:55	INW	3	4	0	0	0	1	0	0	0	0	0	0	0	
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APhi CERC CICA DELP PSYL HDPS HDTI LEPi LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	
0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	
0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	
0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	
0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	6	
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
0	0	0	0	9	0	0	0	0	0	0	0	1	0	0	0	0	1	0	12	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE SET	TIME DATE	SET OUT LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI1	14JUN89	21:05	15JUN89	4:00	6:55 INW	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0
MI1	15JUN89	4:00	15JUN89	6:55	2:55 INW	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0
MI1	15JUN89	4:00	15JUN89	6:55	2:55 INW	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0
MI1	15JUN89	4:00	15JUN89	6:55	2:55 INW	3	4	0	0	0	0	0	0	0	0	0	0	0	2	0
MI1	15JUN89	4:00	15JUN89	6:55	2:55 INW	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0
MI1	15JUN89	6:55	15JUN89	10:00	3:05 IND	1	4	7	0	0	0	0	0	0	0	0	0	0	1	0
MI1	15JUN89	6:55	15JUN89	10:00	3:05 IND	2	4	7	0	0	0	0	0	0	0	0	0	1	0	5
MI1	15JUN89	6:55	15JUN89	10:00	3:05 IND	3	4	6	0	0	0	0	0	0	0	0	0	0	4	0
MI1	15JUN89	6:55	15JUN89	10:00	3:05 IND	4	4	8	0	0	0	0	0	0	0	0	0	0	0	9
MI1	15JUN89	10:00	15JUN89	13:05	3:05 IND	1	4	100	0	0	0	0	0	0	0	0	0	0	0	5
MI1	15JUN89	10:00	15JUN89	13:05	3:05 IND	2	4	34	0	0	1	0	0	0	0	0	0	0	0	9
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	16
0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108
0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC	
MI1	15JUN89	10:00	15JUN89	13:05	3:05	IND	3	4	52	0	0	0	0	0	0	0	1	0	2	0	
MI1	15JUN89	10:00	15JUN89	13:05	3:05	IND	4	4	66	0	0	0	0	0	0	0	1	0	4	0	
MI1	27JUN89	10:50	28JUN89	5:40	18:50	WET	1	4	8	0	0	0	0	0	1	0	0	0	0	3	0
MI1	27JUN89	10:50	28JUN89	5:40	18:50	WET	2	4	57	0	1	0	0	0	0	0	0	2	0	2	1
MI1	27JUN89	10:50	28JUN89	5:40	18:50	WET	3	4	46	0	0	0	0	0	0	0	0	0	0	3	0
MI1	27JUN89	10:50	28JUN89	5:40	18:50	WET	4	4	15	0	0	0	0	0	0	0	0	4	8	0	
MI1	28JUN89	6:05	28JUN89	12:45	6:40	DRY	1	4	21	0	0	0	0	0	0	0	0	0	0	10	0
MI1	28JUN89	6:05	28JUN89	12:45	6:40	DRY	2	4	42	0	0	4	0	0	0	0	0	2	0	4	0
MI1	28JUN89	6:05	28JUN89	12:45	6:40	DRY	3	4	41	0	0	0	0	0	0	0	0	1	0	15	0
MI1	28JUN89	6:05	28JUN89	12:45	6:40	DRY	4	4	36	0	0	0	0	0	1	0	0	1	0	15	0
MI1	28JUN89	13:10	29JUN89	13:10	24:00	24H	1	4	43	0	0	0	3	0	0	0	0	0	0	7	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																					
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	
1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
0	0	0	0	0	0	1	1	0	0	0	0	0	3	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																					
0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	
0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	
0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	20	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	67	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	
0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	42	
0	0	0	0	10	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	43	
0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	57	
0	0	0	0	20	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	79	
0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	
0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE SET	TIME DATE	SET OUT	REP LENGTH	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI1	28JUN89	13:10	29JUN89	13:10	24:00	24H	2	4	68	0	0	0	0	0	0	0	0	1	0	0
MI1	28JUN89	13:10	29JUN89	13:10	24:00	24H	3	4	39	0	0	0	0	0	0	0	0	0	2	0
MI1	28JUN89	13:10	29JUN89	13:10	24:00	24H	4	4	17	0	0	0	0	0	0	0	0	2	3	0
MI1	13JUL89	7:50	14JUL89	8:55	25:05	24H	1	4	27	0	0	5	0	0	0	0	0	3	1	9
MI1	13JUL89	7:50	14JUL89	8:55	25:05	24H	2	4	30	0	0	5	0	0	0	0	0	2	0	3
MI1	13JUL89	7:50	14JUL89	8:55	25:05	24H	3	4	37	0	0	0	0	0	0	0	0	0	0	2
MI1	13JUL89	7:50	14JUL89	8:55	25:05	24H	4	4	28	0	0	3	0	0	0	0	0	1	0	3
MI1	26JUL89	7:40	27JUL89	8:20	24:40	24H	1	4	1	0	0	3	0	0	0	0	0	0	0	3
MI1	26JUL89	7:40	27JUL89	8:20	24:40	24H	2	4	6	0	0	1	0	0	0	0	0	1	0	5
MI1	26JUL89	7:40	27JUL89	8:20	24:40	24H	3	4	5	0	0	6	0	0	0	0	0	2	0	4
MI1	26JUL89	7:40	27JUL89	8:20	24:40	24H	4	4	15	0	0	5	0	0	0	0	1	0	1	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	62
0	0	0	0	25	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	51
0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	51
0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	46
0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	44
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	48
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	19
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI1	27JUL89	8:35	27JUL89	15:15	6:40 WET	1	4	8	0	0	2	0	0	0	0	0	1	0	2	0
MI1	27JUL89	8:35	27JUL89	15:15	6:40 WET	2	4	7	0	0	5	0	0	0	0	0	2	0	1	0
MI1	27JUL89	8:35	27JUL89	15:15	6:40 WET	3	4	4	0	0	11	0	0	0	0	0	3	0	1	2
MI1	27JUL89	8:35	27JUL89	15:15	6:40 WET	4	4	42	0	0	8	0	0	0	0	0	0	0	1	1
MI1	27JUL89	15:15	28JUL89	5:40	14:25 WET	1	4	0	0	0	1	0	0	0	0	0	0	0	1	0
MI1	27JUL89	15:15	28JUL89	5:40	14:25 WET	2	4	0	0	0	0	0	0	0	0	0	0	0	0	1
MI1	27JUL89	15:15	28JUL89	5:40	14:25 WET	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0
MI1	27JUL89	15:15	28JUL89	5:40	14:25 WET	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0
MI1	15AUG89	9:55	16AUG89	11:20	25:25 24H	1	4	3	0	0	13	0	0	0	0	0	4	0	7	0
MI1	15AUG89	9:55	16AUG89	11:20	25:25 24H	2	4	14	0	0	1	0	0	0	0	0	0	0	1	0
MI1	15AUG89	9:55	16AUG89	11:20	25:25 24H	3	4	13	0	0	1	0	0	0	0	0	0	0	2	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN CAST TOTAL																				
0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	18
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	18
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	28
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	55
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	27
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no.·0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI1	15AUG89	9:55	16AUG89	11:20	25:25 24H	4	4	14	0	0	0	0	0	0	0	0	1	0	0	0
MI1	24AUG89	11:30	25AUG89	11:10	23:40 24H	1	4	8	0	0	6	0	0	0	0	0	8	0	1	0
MI1	24AUG89	11:30	25AUG89	11:10	23:40 24H	2	4	12	0	0	1	0	0	0	0	0	9	0	3	0
MI1	24AUG89	11:30	25AUG89	11:10	23:40 24H	3	4	27	0	0	0	0	1	0	0	0	4	0	2	0
MI1	24AUG89	11:30	25AUG89	11:10	23:40 24H	4	4	13	0	0	2	0	0	0	0	0	2	1	0	1
MI1	29AUG89	14:15	30AUG89	16:10	25:55 24H	1	4	15	0	0	0	0	1	0	0	0	1	0	0	0
MI1	29AUG89	14:15	30AUG89	16:10	25:55 24H	2	4	12	0	0	5	0	0	0	0	0	2	0	0	0
MI1	29AUG89	14:15	30AUG89	16:10	25:55 24H	3	4	10	0	0	1	0	0	0	0	1	0	2	0	1
MI1	29AUG89	14:15	30AUG89	16:10	25:55 24H	4	4	18	0	0	2	0	0	0	0	0	1	0	0	0
MI1	12SEP89	10:35	13SEP89	10:50	24:15 24H	1	4	10	0	0	2	0	1	0	0	0	1	0	1	0
MI1	12SEP89	10:35	13SEP89	10:50	24:15 24H	2	4	4	0	0	0	0	0	0	0	0	0	1	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPAH SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	1	0	0	2	0	0	0	1	0	1	0	0	1	0	0	0
0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	0	6	0	0	0	0	2	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	23	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	31	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	37	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	29	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	25	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>). .

SAMPLE SITE	DATE SET	TIME SET	SAMPLE SET	TIME DATE	SET OUT LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI1	12SEP89	10:35	13SEP89	10:50	24:15 24H	3	4	9	0	0	0	0	0	0	0	0	0	0	0	
MI1	12SEP89	10:35	13SEP89	10:50	24:15 24H	4	4	11	0	0	1	0	0	0	0	0	0	0	0	
MI2	27APR89	10:40	28APR89	11:10	24:30 24H	1	4	2	0	0	17	0	0	0	0	0	0	0	0	
MI2	27APR89	10:40	28APR89	11:10	24:30 24H	2	4	3	0	0	0	0	0	0	0	0	0	0	0	
MI2	27APR89	10:40	28APR89	11:10	24:30 24H	3	4	0	0	0	4	0	0	0	0	0	0	1	1	
MI2	27APR89	10:40	28APR89	11:10	24:30 24H	4	4	0	0	0	1	0	0	0	0	0	0	0	0	
MI2	03MAY89	6:40	03MAY89	14:40	8:00 DRY	1	4	1	0	0	6	0	0	0	0	0	5	0	0	
MI2	03MAY89	6:40	03MAY89	14:40	8:00 DRY	2	4	9	0	0	5	0	0	0	0	0	0	0	0	
MI2	03MAY89	6:40	03MAY89	14:40	8:00 DRY	3	4	5	0	0	6	0	0	0	0	0	0	0	0	
MI2	03MAY89	6:40	03MAY89	14:40	8:00 DRY	4	4	0	0	0	15	0	0	0	0	0	2	0	0	
MI2	03MAY89	14:55	03MAY89	19:35	4:40 WET	1	4	0	0	0	0	0	0	0	0	1	0	0	0	
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	12	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI2	03MAY89	14:55	03MAY89	19:35	4:40	WET	2	4	0	0	0	0	0	0	0	0	0	0	0	0
MI2	03MAY89	14:55	03MAY89	19:35	4:40	WET	3	4	0	0	0	0	0	0	0	0	0	0	0	0
MI2	03MAY89	14:55	03MAY89	19:35	4:40	WET	4	4	0	0	0	0	0	0	0	0	0	0	0	0
MI2	16MAY89	7:15	16MAY89	13:50	6:35	DRY	1	4	2	0	0	0	0	0	0	0	0	0	1	0
MI2	16MAY89	7:15	16MAY89	13:50	6:35	DRY	2	4	8	0	0	0	0	0	0	0	0	0	0	0
MI2	16MAY89	7:15	16MAY89	13:50	6:35	DRY	3	4	7	0	0	0	0	0	0	0	0	0	0	0
MI2	16MAY89	7:15	16MAY89	13:50	6:35	DRY	4	4	21	0	0	0	0	0	0	0	0	0	0	0
MI2	16MAY89	14:10	17MAY89	7:15	17:05	WET	1	4	0	0	0	0	0	0	0	0	0	0	0	0
MI2	16MAY89	14:10	17MAY89	7:15	17:05	WET	2	4	1	0	0	0	0	0	0	0	0	0	0	0
MI2	16MAY89	14:10	17MAY89	7:15	17:05	WET	3	4	0	0	0	0	0	0	0	0	0	0	0	0
MI2	16MAY89	14:10	17MAY89	7:15	17:05	WET	4	4	0	0	0	0	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPAH SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI2	31MAY89	12:50	01JUN89	7:05	18:15	WET	1	4	5	0	0	0	0	0	0	0	0	0	0	0
MI2	31MAY89	12:50	01JUN89	7:05	18:15	WET	2	4	16	0	0	0	0	0	0	0	0	0	0	0
MI2	31MAY89	12:50	01JUN89	7:05	18:15	WET	3	4	20	0	0	0	0	0	0	0	0	0	0	0
MI2	31MAY89	12:50	01JUN89	7:05	18:15	WET	4	4	4	0	0	0	0	0	0	0	0	0	0	0
MI2	01JUN89	7:15	01JUN89	14:20	7:05	DRY	1	4	27	0	0	2	0	0	0	0	0	0	0	0
MI2	01JUN89	7:15	01JUN89	14:20	7:05	DRY	2	4	24	0	0	0	0	0	0	0	0	0	0	0
MI2	01JUN89	7:15	01JUN89	14:20	7:05	DRY	3	4	33	0	0	1	0	0	0	1	0	0	0	0
MI2	01JUN89	7:15	01JUN89	14:20	7:05	DRY	4	4	8	0	0	1	0	0	0	0	0	0	0	0
MI2	01JUN89	14:25	02JUN89	6:25	16:00	WET	1	4	1	0	0	0	0	0	0	0	0	0	0	0
MI2	01JUN89	14:25	02JUN89	6:25	16:00	WET	2	4	4	0	0	0	0	0	0	0	0	0	0	0
MI2	01JUN89	14:25	02JUN89	6:25	16:00	WET	3	4	16	0	0	0	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEP I LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	25
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI2	01JUN89	14:25	02JUN89	6:25	16:00	WET	4	4	7	0	0	0	0	0	0	0	0	0	0	
MI2	13JUN89	13:10	14JUN89	4:15	15:05	WET	1	4	0	0	0	0	0	0	0	0	0	0	0	
MI2	13JUN89	13:10	14JUN89	4:15	15:05	WET	2	4	5	0	0	0	0	0	0	0	0	0	0	
MI2	13JUN89	13:10	14JUN89	4:15	15:05	WET	3	4	2	0	0	0	0	0	0	0	0	0	1	
MI2	13JUN89	13:10	14JUN89	4:15	15:05	WET	4	4	0	0	0	1	0	0	0	0	0	0	0	
MI2	14JUN89	4:35	14JUN89	13:45	9:10	DRY	1	4	33	0	0	3	0	0	0	0	0	0	0	
MI2	14JUN89	4:35	14JUN89	13:45	9:10	DRY	2	4	6	0	0	0	0	0	0	0	1	0	1	
MI2	14JUN89	4:35	14JUN89	13:45	9:10	DRY	3	4	8	0	0	0	0	0	0	0	0	0	0	
MI2	14JUN89	4:35	14JUN89	13:45	9:10	DRY	4	4	28	0	0	0	0	0	0	0	1	0	0	
MI2	27JUN89	10:45	28JUN89	5:25	18:40	WET	1	4	12	0	0	0	0	0	0	0	0	0	0	
MI2	27JUN89	10:45	28JUN89	5:25	18:40	WET	2	4	11	0	0	0	0	0	0	0	0	0	0	
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	17	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE DATE TIME SAMPLE TIME SET SET REP REPS CHIA CHIL CHIP CERA CERP DIAD CECI CHLR CULI DOLI EMPI EPHY MUSC  
SITE SET SET DATE OUT LENGTH

MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST

LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI2	13JUL89	7:45	14JUL89	8:35	24:50 24H	2	4	10	0	0	0	0	0	0	0	0	1	0	0	0
MI2	13JUL89	7:45	14JUL89	8:35	24:50 24H	3	4	49	0	0	0	0	0	0	0	0	0	0	0	3
MI2	13JUL89	7:45	14JUL89	8:35	24:50 24H	4	4	16	0	0	0	1	0	0	0	0	0	0	0	0
MI2	26JUL89	7:30	27JUL89	7:55	24:25 24H	1	4	21	0	0	1	0	0	0	0	0	2	0	2	0
MI2	26JUL89	7:30	27JUL89	7:55	24:25 24H	2	4	26	0	0	0	0	0	0	0	0	0	1	0	1
MI2	26JUL89	7:30	27JUL89	7:55	24:25 24H	3	4	20	0	0	0	0	0	0	0	0	0	0	1	0
MI2	26JUL89	7:30	27JUL89	7:55	24:25 24H	4	4	8	0	0	0	0	0	0	0	0	0	0	0	0
MI2	27JUL89	8:15	27JUL89	14:45	6:30 WET	1	4	20	0	0	1	0	0	0	0	0	0	0	0	0
MI2	27JUL89	8:15	27JUL89	14:45	6:30 WET	2	4	26	0	0	0	0	0	0	0	0	0	1	0	1
MI2	27JUL89	8:15	27JUL89	14:45	6:30 WET	3	4	10	0	0	0	0	0	0	0	0	0	0	4	0
MI2	27JUL89	8:15	27JUL89	14:45	6:30 WET	4	4	16	0	0	0	0	0	0	0	0	1	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	18

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI2	27JUL89	15:05	28JUL89	5:25	14:20	WET	1	4	6	0	0	0	0	0	0	0	0	0	0	0
MI2	27JUL89	15:05	28JUL89	5:25	14:20	WET	2	4	3	0	0	0	0	0	0	0	0	1	0	0
MI2	27JUL89	15:05	28JUL89	5:25	14:20	WET	3	4	4	0	0	0	0	0	0	0	0	0	0	0
MI2	27JUL89	15:05	28JUL89	5:25	14:20	WET	4	4	1	0	0	0	0	0	0	0	0	0	0	0
MI2	15AUG89	9:45	16AUG89	11:05	25:20	24H	1	4	11	0	0	0	0	0	0	0	0	0	0	0
MI2	15AUG89	9:45	16AUG89	11:05	25:20	24H	2	4	9	0	0	0	0	0	0	0	0	0	0	0
MI2	15AUG89	9:45	16AUG89	11:05	25:20	24H	3	4	9	0	0	0	0	0	0	0	0	0	0	0
MI2	15AUG89	9:45	16AUG89	11:05	25:20	24H	4	4	6	0	0	0	0	0	0	0	0	0	0	0
MI2	24AUG89	10:50	25AUG89	10:45	23:55	24H	1	4	9	0	0	1	0	0	0	0	0	0	1	0
MI2	24AUG89	10:50	25AUG89	10:45	23:55	24H	2	4	5	0	0	0	0	0	0	0	0	4	0	0
MI2	24AUG89	10:50	25AUG89	10:45	23:55	24H	3	4	8	0	0	0	0	0	0	0	1	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI2	24AUG89	10:50	25AUG89	10:45	23:55 24H	4	4	4	0	0	0	0	0	0	0	0	0	0	0	
MI2	29AUG89	14:00	30AUG89	15:15	25:15 24H	1	4	38	0	0	0	0	0	0	0	0	1	0	0	
MI2	29AUG89	14:00	30AUG89	15:15	25:15 24H	2	4	4	0	0	0	0	0	0	0	0	2	0	0	
MI2	29AUG89	14:00	30AUG89	15:15	25:15 24H	3	4	12	0	0	0	0	0	0	0	0	0	0	0	
MI2	29AUG89	14:00	30AUG89	15:15	25:15 24H	4	4	25	0	0	0	0	0	0	0	0	0	0	0	
MI2	12SEP89	10:25	13SEP89	10:20	23:55 24H	1	4	2	0	0	0	0	0	0	0	0	0	0	0	
MI2	12SEP89	10:25	13SEP89	10:20	23:55 24H	2	4	4	0	0	0	0	0	0	0	0	0	0	0	
MI2	12SEP89	10:25	13SEP89	10:20	23:55 24H	3	4	4	0	0	0	0	0	0	0	0	0	0	0	
MI2	12SEP89	10:25	13SEP89	10:20	23:55 24H	4	4	2	0	0	0	0	0	0	0	0	1	0	0	
MI3	27APR89	11:09	28APR89	10:45	23:36 24H	1	4	4	0	0	0	0	0	0	0	0	0	0	0	
MI3	27APR89	11:09	28APR89	10:45	23:36 24H	2	4	1	0	0	0	0	0	0	0	0	0	0	0	
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	8	
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	13	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI3	27APR89	11:09	28APR89	10:45	23:36 24H	3	4	3	0	0	0	0	0	0	0	0	0	0	0	
MI3	27APR89	11:09	27APR89	20:40	9:31 DRY	4	4	1	0	0	0	0	0	0	0	0	0	0	0	
MI3	03MAY89	6:30	03MAY89	15:00	8:30 DRY	1	4	26	0	0	2	0	0	0	0	0	0	0	0	
MI3	03MAY89	6:30	03MAY89	15:00	8:30 DRY	2	4	8	0	0	0	0	0	0	0	0	0	0	0	
MI3	03MAY89	6:30	03MAY89	15:00	8:30 DRY	3	4	6	0	0	18	0	0	0	0	0	3	0	0	
MI3	03MAY89	6:30	03MAY89	15:00	8:30 DRY	4	4	25	0	0	11	0	0	0	0	0	2	0	0	
MI3	03MAY89	15:18	03MAY89	19:25	4:07 WET	1	3	0	0	0	0	0	0	0	0	0	0	0	0	
MI3	03MAY89	15:18	03MAY89	19:25	4:07 WET	2	3	4	0	0	0	0	0	0	0	0	0	0	0	
MI3	03MAY89	15:18	03MAY89	19:25	4:07 WET	3	3	0	0	0	0	0	0	0	0	0	0	0	0	
MI3	16MAY89	7:30	16MAY89	14:15	6:45 DRY	1	4	19	0	0	0	0	0	0	0	0	0	0	0	
MI3	16MAY89	7:30	16MAY89	14:15	6:45 DRY	2	4	22	0	0	0	0	0	0	0	0	2	0	0	
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE SET	TIME DATE	SET OUT LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC			
MI3	16MAY89	7:30	16MAY89	14:15	6:45 DRY	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0			
MI3	16MAY89	7:30	16MAY89	14:15	6:45 DRY	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0			
MI3	16MAY89	14:30	17MAY89	6:50	16:20 WET	1	4	8	0	0	0	0	0	0	0	0	0	0	0	0			
MI3	16MAY89	14:30	17MAY89	6:50	16:20 WET	2	4	4	0	0	0	1	0	0	0	0	0	0	0	0			
MI3	16MAY89	14:30	17MAY89	6:50	16:20 WET	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0			
MI3	16MAY89	14:30	17MAY89	6:50	16:20 WET	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0			
MI3	31MAY89	12:45	01JUN89	7:20	18:35 WET	1	4	54	0	0	2	0	0	0	0	0	0	0	1	0			
MI3	31MAY89	12:45	01JUN89	7:20	18:35 WET	2	4	19	0	0	0	0	0	0	0	0	0	0	0	0			
MI3	31MAY89	12:45	01JUN89	7:20	18:35 WET	3	4	14	0	0	0	0	0	0	0	0	0	2	0	1			
MI3	31MAY89	12:45	01JUN89	7:20	18:35 WET	4	4	17	0	0	0	0	0	0	0	0	0	1	0	0			
MI3	01JUN89	7:35	01JUN89	14:40	7:05 DRY	1	4	38	0	0	0	0	0	0	0	0	0	0	0	0			
MUSL	PHOR	PSYC	SCAT	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	CEPH	DIAP	ENCY	EULO	ICHN	MYMA	HYAD	PTER	SCEL	CARA	CIID	COCC	ELAT	HIST
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH	SALP	SCOL	STAP	APHI	CERC	CICA	DELP	PSYL	HDPS	HDTI	LEPI	LEPT	SMIN	COEN	LYGA	SALD	THRI	ACAR	ARAN	GAST	TOTAL		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	58			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38		

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no.·0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI3	01JUN89	7:35	01JUN89	14:40	7:05	DRY	2	4	21	0	0	0	0	0	0	0	0	0	0	0
MI3	01JUN89	7:35	01JUN89	14:40	7:05	DRY	3	4	21	0	0	0	0	0	0	0	1	0	1	0
MI3	01JUN89	7:35	01JUN89	14:40	7:05	DRY	4	4	27	0	0	0	0	0	0	0	1	0	0	0
MI3	01JUN89	14:55	02JUN89	6:10	15:15	WET	1	4	18	0	0	2	0	0	0	0	0	0	0	0
MI3	01JUN89	14:55	02JUN89	6:10	15:15	WET	2	4	7	0	0	0	0	0	0	0	0	0	0	0
MI3	01JUN89	14:55	02JUN89	6:10	15:15	WET	3	4	6	0	0	0	0	0	0	0	3	0	0	0
MI3	01JUN89	14:55	02JUN89	6:10	15:15	WET	4	4	12	0	0	0	0	0	0	0	0	0	0	0
MI3	13JUN89	13:20	14JUN89	3:50	14:30	WET	1	4	92	0	0	0	0	0	0	0	0	0	0	0
MI3	13JUN89	13:20	14JUN89	3:50	14:30	WET	2	4	30	0	0	0	0	0	0	0	0	0	0	0
MI3	13JUN89	13:20	14JUN89	3:50	14:30	WET	3	4	26	0	0	0	0	0	0	0	1	0	0	0
MI3	13JUN89	13:20	14JUN89	3:50	14:30	WET	4	4	31	0	0	0	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APhi CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	94
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	31	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	28	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI3	14JUN89	4:05	14JUN89	13:50	9:45	DRY	1	4	255	0	0	1	0	0	0	0	1	0	0	0
MI3	14JUN89	4:05	14JUN89	13:50	9:45	DRY	2	4	59	0	0	0	0	0	0	0	2	0	0	1
MI3	14JUN89	4:05	14JUN89	13:50	9:45	DRY	3	4	62	0	0	0	0	0	0	0	0	1	0	1
MI3	14JUN89	4:05	14JUN89	13:50	9:45	DRY	4	4	86	0	0	0	0	0	0	0	0	0	0	0
MI3	14JUN89	14:55	14JUN89	17:50	2:55	INW	1	4	6	0	0	0	0	0	0	0	0	1	0	0
MI3	14JUN89	14:55	14JUN89	17:50	2:55	INW	2	4	4	0	0	0	0	0	0	0	0	0	0	1
MI3	14JUN89	14:55	14JUN89	17:50	2:55	INW	3	4	0	0	0	0	0	0	0	0	0	0	0	0
MI3	14JUN89	14:55	14JUN89	17:50	2:55	INW	4	4	0	0	0	0	0	0	0	0	0	0	0	0
MI3	14JUN89	17:50	14JUN89	20:55	3:05	INW	1	4	0	0	0	0	0	0	0	0	0	0	0	0
MI3	14JUN89	17:50	14JUN89	20:55	3:05	INW	2	4	0	0	0	0	0	0	0	0	0	0	0	0
MI3	14JUN89	17:50	14JUN89	20:55	3:05	INW	3	4	0	0	0	0	0	0	0	0	0	0	0	0
MI3	14JUN89	17:50	14JUN89	20:55	3:05	INW	4	0	0	0	0	0	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	258	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	66	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC	
MI3	14JUN89	17:50	14JUN89	20:55	3:05	INW	4	4	0	0	0	0	0	0	0	0	0	0	0	0	
MI3	14JUN89	20:55	15JUN89	4:20	7:25	INW	1	4	1	0	0	0	0	0	0	0	0	0	0	0	
MI3	14JUN89	20:55	15JUN89	4:20	7:25	INW	2	4	2	0	0	0	0	0	0	0	0	0	0	0	
MI3	14JUN89	20:55	15JUN89	4:20	7:25	INW	3	4	0	0	0	0	0	0	0	0	0	0	0	0	
MI3	14JUN89	20:55	15JUN89	4:20	7:25	INW	4	4	2	0	0	0	0	0	0	0	0	0	0	0	
MI3	15JUN89	4:20	15JUN89	7:15	2:55	INW	1	4	3	0	0	0	0	0	0	0	0	0	0	0	
MI3	15JUN89	4:20	15JUN89	7:15	2:55	INW	2	4	0	0	0	0	0	0	0	0	0	0	0	0	
MI3	15JUN89	4:20	15JUN89	7:15	2:55	INW	3	4	3	0	0	0	0	0	0	0	0	0	0	0	
MI3	15JUN89	4:20	15JUN89	7:15	2:55	INW	4	4	5	1	0	0	0	0	0	0	0	0	0	0	
MI3	15JUN89	7:15	15JUN89	10:10	2:55	IND	1	4	2	0	0	0	0	0	0	0	0	0	0	0	
MI3	15JUN89	7:15	15JUN89	10:10	2:55	IND	2	4	4	0	0	0	0	0	0	0	0	0	0	0	
MUSL	PHOR	PSYC	SCAT	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	CEPH	DIAP	ENCY	EULO	ICHN	MYMA	HYAD	PTER	SCEL	CARA	CIID	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH	SALP	SCOL	STAP	APHI	CERC	CICA	DELP	PSYL	HDPS	HDTI	LEPI	LEPT	SMIN	COEN	LYGA	SA LD	THRI	ACAR	ARAN	GAST	TOTAL
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI3	15JUN89	7:15	15JUN89	10:10	2:55	IND	3	4	9	0	0	0	0	0	0	0	1	1	0	0
MI3	15JUN89	7:15	15JUN89	10:10	2:55	IND	4	4	11	0	0	0	0	0	0	0	0	0	0	0
MI3	15JUN89	10:10	15JUN89	13:15	3:05	IND	1	4	31	0	0	1	0	0	0	0	0	1	0	0
MI3	15JUN89	10:10	15JUN89	13:15	3:05	IND	2	4	18	0	0	0	0	0	0	0	0	0	0	0
MI3	15JUN89	10:10	15JUN89	13:15	3:05	IND	3	4	5	0	0	1	0	0	0	0	0	0	0	0
MI3	15JUN89	10:10	15JUN89	13:15	3:05	IND	4	4	18	0	0	0	0	0	0	0	0	0	0	0
MI3	27JUN89	10:40	28JUN89	5:05	18:25	WET	1	4	6	0	0	1	0	0	0	0	0	0	0	0
MI3	27JUN89	10:40	28JUN89	5:05	18:25	WET	2	4	26	0	0	0	0	0	0	0	0	0	0	0
MI3	27JUN89	10:40	28JUN89	5:05	18:25	WET	3	4	22	0	0	0	0	0	0	0	0	0	1	0
MI3	27JUN89	10:40	28JUN89	5:05	18:25	WET	4	4	26	0	0	0	0	0	0	0	0	0	1	0
MI3	28JUN89	5:25	28JUN89	12:05	6:40	DRY	1	4	1	0	0	1	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPAH SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	9	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	30
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	28
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE SET	TIME DATE	SET OUT LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI3	28JUN89	5:25	28JUN89	12:05	6:40 DRY	2	4	21	0	0	0	0	0	0	0	0	0	0	1	0
MI3	28JUN89	5:25	28JUN89	12:05	6:40 DRY	3	4	24	0	0	0	0	0	0	0	0	0	0	0	0
MI3	28JUN89	5:25	28JUN89	12:05	6:40 DRY	4	4	18	0	0	1	0	0	1	0	0	0	0	3	0
MI3	28JUN89	12:25	29JUN89	12:30	24:05 24H	1	4	31	0	0	0	0	0	0	0	0	0	2	0	0
MI3	28JUN89	12:25	29JUN89	12:30	24:05 24H	2	4	108	0	1	1	0	0	0	0	0	0	1	0	0
MI3	28JUN89	12:25	29JUN89	12:30	24:05 24H	3	4	29	0	0	0	1	0	0	0	0	0	0	1	0
MI3	28JUN89	12:25	29JUN89	12:30	24:05 24H	4	4	75	0	0	1	0	0	0	0	0	0	0	1	0
MI3	13JUL89	7:40	14JUL89	8:15	24:35 24H	1	4	138	0	0	1	0	0	0	0	0	0	2	0	5
MI3	13JUL89	7:40	14JUL89	8:15	24:35 24H	2	4	150	0	0	1	0	0	0	0	0	0	7	0	4
MI3	13JUL89	7:40	14JUL89	8:15	24:35 24H	3	4	68	0	0	2	0	0	0	0	0	0	0	2	0
MI3	13JUL89	7:40	14JUL89	8:15	24:35 24H	4	4	56	0	0	2	0	0	0	0	0	0	0	6	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	114	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	79	
0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	152	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	164	
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI3	26JUL89	7:20	27JUL89	7:30	24:10 24H	1	4	18	0	0	1	0	0	0	0	0	0	0	1	0
MI3	26JUL89	7:20	27JUL89	7:30	24:10 24H	2	4	22	0	0	1	0	0	0	0	0	0	0	0	0
MI3	26JUL89	7:20	27JUL89	7:30	24:10 24H	3	4	33	0	0	1	0	0	0	0	0	0	1	0	3
MI3	26JUL89	7:20	27JUL89	7:30	24:10 24H	4	4	4	0	0	1	0	0	0	0	0	0	0	0	0
MI3	27JUL89	7:50	27JUL89	14:10	6:20 WET	1	4	23	0	0	0	0	0	0	0	0	0	0	1	0
MI3	27JUL89	7:50	27JUL89	14:10	6:20 WET	2	4	22	0	0	4	0	0	0	0	0	0	2	0	0
MI3	27JUL89	7:50	27JUL89	14:10	6:20 WET	3	4	27	0	0	1	0	0	0	0	0	0	1	0	1
MI3	27JUL89	7:50	27JUL89	14:10	6:20 WET	4	4	37	0	0	0	0	0	0	0	0	0	0	0	0
MI3	27JUL89	14:35	28JUL89	5:10	14:35 WET	1	4	4	0	0	0	0	0	0	0	0	0	0	0	0
MI3	27JUL89	14:35	28JUL89	5:10	14:35 WET	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0
MI3	27JUL89	14:35	28JUL89	5:10	14:35 WET	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	22	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	26
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	32
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	39
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC		
MI3	27JUL89	14:35	28JUL89	5:10	14:35	WET	4	4	0	0	0	0	0	0	0	0	0	0	0		
MI3	15AUG89	9:35	16AUG89	10:45	25:10	24H	1	4	9	0	0	0	0	0	0	0	0	1	0	0	
MI3	15AUG89	9:35	16AUG89	10:45	25:10	24H	2	4	21	0	0	0	0	0	0	0	0	2	0	0	
MI3	15AUG89	9:35	16AUG89	10:45	25:10	24H	3	4	20	0	0	0	0	0	0	0	0	0	0	0	
MI3	15AUG89	9:35	16AUG89	10:45	25:10	24H	4	4	15	0	0	0	0	0	0	0	0	0	1	1	
MI3	24AUG89	12:45	25AUG89	10:15	21:30	24H	1	4	11	0	0	1	0	0	0	0	0	10	0	1	1
MI3	24AUG89	12:45	25AUG89	10:15	21:30	24H	2	4	16	0	0	0	0	0	0	0	0	1	1	0	0
MI3	24AUG89	12:45	25AUG89	10:15	21:30	24H	3	4	9	0	0	0	0	0	0	0	0	0	0	0	0
MI3	24AUG89	12:45	25AUG89	10:15	21:30	24H	4	4	19	0	0	0	0	0	0	0	0	1	0	0	0
MI3	29AUG89	13:50	30AUG89	14:45	24:55	24H	1	4	24	0	0	0	0	0	0	0	0	2	0	0	0
MI3	29AUG89	13:50	30AUG89	14:45	24:55	24H	2	4	33	0	0	3	0	0	0	0	0	0	0	0	0

MUSL	PHOR	PSYC	SCAT	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	CEPH	DIAP	ENCY	EULO	ICHN	MYMA	HYAD	PTER	SCEL	CARA	CIID	COCC	ELAT	HIST
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LATH	SALP	SCOL	STAP	APHI	CERC	CICA	DELP	PSYL	HDPS	HDTI	LEPI	LEPT	SMIN	COEN	LYGA	SALD	THRI	ACAR	ARAN	GAST	TOTAL	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI3	29AUG89	13:50	30AUG89	14:45	24:55	24H	3	4	14	0	0	0	0	0	0	0	0	1	0	0
MI3	29AUG89	13:50	30AUG89	14:45	24:55	24H	4	4	23	0	0	0	0	0	0	0	0	0	0	0
MI3	12SEP89	10:15	13SEP89	9:55	23:40	24H	1	4	25	0	0	0	0	0	0	0	0	0	0	1
MI3	12SEP89	10:15	13SEP89	9:55	23:40	24H	2	4	19	0	0	0	0	0	0	0	0	0	1	0
MI3	12SEP89	10:15	13SEP89	9:55	23:40	24H	3	4	14	0	0	0	0	0	0	0	0	1	0	0
MI3	12SEP89	10:15	13SEP89	9:55	23:40	24H	4	4	31	0	0	0	0	0	0	0	0	1	0	0
MI4	27APR89	11:10	27APR89	20:10	9:00	DRY	1	4	0	0	0	13	0	0	0	0	0	0	0	0
MI4	27APR89	11:10	27APR89	20:10	9:00	DRY	2	4	2	0	0	1	0	0	0	0	0	0	0	0
MI4	27APR89	11:10	27APR89	20:10	9:00	DRY	3	4	0	0	0	2	0	0	0	0	0	1	0	0
MI4	27APR89	11:10	27APR89	20:10	9:00	DRY	4	4	0	0	0	4	0	0	0	0	0	0	0	0
MI4	27APR89	20:10	28APR89	10:35	14:25	WET	1	4	1	0	0	8	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	23
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no.·0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI4	27APR89	20:10	28APR89	10:35	14:25	WET	2	4	1	0	0	0	0	0	0	0	0	0	0	0
MI4	27APR89	20:10	28APR89	10:35	14:25	WET	3	4	1	0	0	4	0	0	0	0	0	0	0	0
MI4	27APR89	20:10	28APR89	10:35	14:25	WET	4	4	0	0	0	3	0	0	0	0	0	0	0	0
MI4	03MAY89	6:15	03MAY89	15:20	9:05	DRY	1	4	6	0	0	4	0	0	0	0	0	2	0	0
MI4	03MAY89	6:15	03MAY89	15:20	9:05	DRY	2	4	1	0	0	22	0	0	0	0	0	0	0	1
MI4	03MAY89	6:15	03MAY89	15:20	9:05	DRY	3	4	6	0	0	6	0	0	0	0	0	17	0	0
MI4	03MAY89	6:15	03MAY89	15:20	9:05	DRY	4	4	7	0	0	33	0	0	0	0	0	0	0	0
MI4	03MAY89	15:40	03MAY89	19:10	3:30	WET	1	4	2	0	0	0	0	0	0	0	0	0	0	0
MI4	03MAY89	15:40	03MAY89	19:10	3:30	WET	2	4	0	0	0	1	0	0	0	0	0	0	0	0
MI4	03MAY89	15:40	03MAY89	19:10	3:30	WET	3	4	0	0	0	1	0	0	0	0	0	0	0	0
MI4	03MAY89	15:40	03MAY89	19:10	3:30	WET	4	4	0	0	0	0	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI4	16MAY89	7:45	16MAY89	14:40	6:55	DRY	1	4	20	0	0	0	0	0	0	0	0	1	0	0
MI4	16MAY89	7:45	16MAY89	14:40	6:55	DRY	2	4	18	0	0	7	0	0	0	0	0	1	0	0
MI4	16MAY89	7:45	16MAY89	14:40	6:55	DRY	3	4	20	0	0	5	0	0	0	0	0	0	0	0
MI4	16MAY89	7:45	16MAY89	14:40	6:55	DRY	4	4	96	0	0	27	0	0	0	0	0	1	0	0
MI4	16MAY89	15:05	17MAY89	6:10	15:05	WET	1	4	0	0	0	0	0	0	0	0	0	0	0	0
MI4	16MAY89	15:05	17MAY89	6:10	15:05	WET	2	4	1	0	0	0	0	0	0	0	0	0	0	0
MI4	16MAY89	15:05	17MAY89	6:10	15:05	WET	3	4	0	0	0	0	0	0	0	0	0	0	0	0
MI4	16MAY89	15:05	17MAY89	6:10	15:05	WET	4	4	0	0	0	0	0	0	0	0	0	0	0	0
MI4	31MAY89	12:30	01JUN89	7:40	19:10	WET	1	4	15	0	0	0	0	0	0	0	0	1	0	3
MI4	31MAY89	12:30	01JUN89	7:40	19:10	WET	2	4	16	0	0	0	0	0	0	0	0	1	0	1
MI4	31MAY89	12:30	01JUN89	7:40	19:10	WET	3	4	19	0	0	0	0	0	0	0	0	3	0	2
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	20
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	25

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI4	31MAY89	12:30	01JUN89	7:40	19:10	WET	4	4	13	0	0	0	0	0	0	0	0	0	0	
MI4	01JUN89	8:00	01JUN89	15:00	7:00	DRY	1	4	26	0	0	0	0	0	0	0	2	0	0	
MI4	01JUN89	8:00	01JUN89	15:00	7:00	DRY	2	4	19	0	0	0	0	0	0	0	2	0	0	
MI4	01JUN89	8:00	01JUN89	15:00	7:00	DRY	3	4	12	0	0	0	0	0	0	0	1	0	0	
MI4	01JUN89	8:00	01JUN89	15:00	7:00	DRY	4	4	12	0	0	0	0	0	0	0	1	0	0	
MI4	01JUN89	15:15	02JUN89	5:40	14:25	WET	1	4	1	0	0	0	0	0	0	0	0	0	0	
MI4	01JUN89	15:15	02JUN89	5:40	14:25	WET	2	4	0	0	0	0	0	0	0	0	0	0	0	
MI4	01JUN89	15:15	02JUN89	5:40	14:25	WET	3	4	0	0	0	0	0	0	0	0	0	0	0	
MI4	01JUN89	15:15	02JUN89	5:40	14:25	WET	4	4	0	0	0	0	0	0	0	0	0	0	0	
MI4	13JUN89	13:40	14JUN89	3:20	13:40	WET	1	4	71	0	0	1	0	0	0	0	0	0	0	
MI4	13JUN89	13:40	14JUN89	3:20	13:40	WET	2	4	18	0	0	1	0	0	0	0	1	0	0	
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	14	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	74	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	21	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI4	13JUN89	13:40	14JUN89	3:20	13:40	WET	3	4	16	0	0	0	0	0	0	0	1	1	0	0
MI4	13JUN89	13:40	14JUN89	3:20	13:40	WET	4	4	40	0	0	1	0	0	0	0	0	1	0	0
MI4	14JUN89	3:45	14JUN89	14:10	10:25	DRY	1	4	161	0	0	11	0	0	0	0	0	1	0	2
MI4	14JUN89	3:45	14JUN89	14:10	10:25	DRY	2	4	27	0	0	2	0	0	0	0	0	9	0	1
MI4	14JUN89	3:45	14JUN89	14:10	10:25	DRY	3	4	77	0	0	1	0	0	0	0	0	1	0	1
MI4	14JUN89	3:45	14JUN89	14:10	10:25	DRY	4	4	94	0	0	5	0	0	0	0	0	4	0	0
MI4	27JUN89	10:30	28JUN89	4:40	18:10	WET	1	4	24	0	0	11	0	0	0	0	0	0	0	1
MI4	27JUN89	10:30	28JUN89	4:40	18:10	WET	2	4	6	0	0	8	0	0	0	0	0	1	0	0
MI4	27JUN89	10:30	28JUN89	4:40	18:10	WET	3	4	26	0	0	5	0	0	0	0	0	0	0	0
MI4	27JUN89	10:30	28JUN89	4:40	18:10	WET	4	4	1	0	0	6	0	0	0	0	0	0	0	0
MI4	28JUN89	5:05	28JUN89	12:25	7:20	DRY	1	4	13	0	0	2	0	0	0	0	0	1	0	4
MUSL PHOR PSYC SCAT SCIA SCMY SPAH SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	21	
0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	45	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	175	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	
0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	84	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	17	
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	33
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC	
MI4	28JUN89	5:05	28JUN89	12:25	7:20	DRY	2	4	6	0	0	0	0	0	0	0	0	0	0		
MI4	28JUN89	5:05	28JUN89	12:25	7:20	DRY	3	4	10	0	0	1	0	0	0	0	0	0	0		
MI4	28JUN89	5:05	28JUN89	12:25	7:20	DRY	4	4	21	0	0	4	0	0	0	0	0	0	3		
MI4	28JUN89	12:45	29JUN89	12:50	24:05	24H	1	4	56	0	0	9	0	0	0	0	0	0	0		
MI4	28JUN89	12:45	29JUN89	12:50	24:05	24H	2	4	21	0	0	6	0	0	0	0	0	1	0		
MI4	28JUN89	12:45	29JUN89	12:50	24:05	24H	3	4	11	0	0	0	0	0	0	0	0	0	0		
MI4	28JUN89	12:45	29JUN89	12:50	24:05	24H	4	4	22	0	0	12	0	0	0	0	0	2	0		
MI4	13JUL89	7:35	14JUL89	7:50	24:15	24H	1	4	95	0	0	4	1	0	0	0	0	1	0		
MI4	13JUL89	7:35	14JUL89	7:50	24:15	24H	2	4	56	0	0	19	0	0	0	0	0	0	0		
MI4	13JUL89	7:35	14JUL89	7:50	24:15	24H	3	4	44	0	0	9	0	0	0	0	0	5	0		
MI4	13JUL89	7:35	14JUL89	7:50	24:15	24H	4	4	13	0	0	26	0	0	0	0	0	1	0		
MUSL	PHOR	PSYC	SCAT	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	CEPH	DIAP	ENCY	EULO	ICHN	MYMA	HYAD	PTER	SCEL	CARA	CIID	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH	SALP	SCOL	STAP	APHI	CERC	CICA	DELP	PSYL	HDPS	HDTI	LEPI	LEPT	SMIN	COEN	LYGA	SALD	THRI	ACAR	ARAN	GAST	TOTAL
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	29	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	66	
0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	34	
0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	37	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	105	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	60	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI4	26JUL89	7:10	27JUL89	7:05	23:55 24H	1	4	16	0	0	6	0	0	0	0	0	7	0	0	0
MI4	26JUL89	7:10	27JUL89	7:05	23:55 24H	2	4	55	0	0	0	0	0	0	0	0	1	0	1	0
MI4	26JUL89	7:10	27JUL89	7:05	23:55 24H	3	4	24	0	0	8	0	0	0	0	0	0	0	3	0
MI4	26JUL89	7:10	27JUL89	7:05	23:55 24H	4	4	13	0	0	6	0	0	0	0	0	1	0	1	0
MI4	27JUL89	7:25	27JUL89	13:45	6:20 WET	1	4	48	0	0	26	0	0	0	0	0	16	0	3	0
MI4	27JUL89	7:25	27JUL89	13:45	6:20 WET	2	4	11	0	0	5	0	0	0	0	0	3	0	0	0
MI4	27JUL89	7:25	27JUL89	13:45	6:20 WET	3	4	20	0	0	5	0	0	0	0	0	0	0	0	0
MI4	27JUL89	7:25	27JUL89	13:45	6:20 WET	4	4	23	0	0	19	0	0	0	0	0	1	0	0	1
MI4	27JUL89	14:05	28JUL89	4:55	14:50 WET	1	4	3	0	0	0	0	0	0	0	0	0	0	0	0
MI4	27JUL89	14:05	28JUL89	4:55	14:50 WET	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0
MI4	27JUL89	14:05	28JUL89	4:55	14:50 WET	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPF LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	58	
0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	39	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96	
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	22	
0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	28	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	

Table 3 continued. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIL	CHIP	CERA	CERP	DIAD	CECI	CHLR	CULI	DOLI	EMPI	EPHY	MUSC
MI4	27JUL89	14:05	28JUL89	4:55	14:50	WET	4	4	0	0	0	0	0	0	0	0	0	0	0	
MI4	15AUG89	9:20	16AUG89	10:15	24:55	24H	1	4	15	0	0	1	0	0	0	0	0	3	0	
MI4	15AUG89	9:20	16AUG89	10:15	24:55	24H	2	4	16	0	0	8	0	0	0	0	0	0	1	
MI4	15AUG89	9:20	16AUG89	10:15	24:55	24H	3	4	6	0	0	25	0	0	0	0	0	4	0	
MI4	15AUG89	9:20	16AUG89	10:15	24:55	24H	4	4	11	0	0	27	0	0	0	0	0	1	0	
MI4	24AUG89	12:10	25AUG89	9:45	21:35	24H	1	4	26	0	0	0	0	0	0	0	0	3	0	
MI4	24AUG89	12:10	25AUG89	9:45	21:35	24H	2	4	17	0	0	2	0	0	0	0	0	5	0	
MI4	24AUG89	12:10	25AUG89	9:45	21:35	24H	3	4	3	0	0	111	0	0	0	0	0	1	0	
MI4	24AUG89	12:10	25AUG89	9:45	21:35	24H	4	4	1	0	0	10	0	0	0	0	0	1	0	
MI4	29AUG89	13:30	30AUG89	14:20	24:50	24H	1	4	30	0	0	0	0	0	0	0	1	0	0	
MI4	29AUG89	13:30	30AUG89	14:20	24:50	24H	2	4	33	0	0	0	0	0	0	0	0	1	0	
MUSL PHOR PSYC SCAT SCIA SCMY SPHA SYRP TIPU BRAC CEPH DIAP ENCY EULO ICHN MYMA HYAD PTER SCEL CARA CIID COCC ELAT HIST																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH SALP SCOL STAP APHI CERC CICA DELP PSYL HDPS HDTI LEPI LEPT SMIN COEN LYGA SALD THRI ACAR ARAN GAST TOTAL																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	25	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	38	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	13	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	33	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	

Table 3 concluded. Mitchell Island Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP CHIA	REPS CHIL	CHIP CERA	CERP DIAD	CECI CHLR	CHLR CULI	DOLI	EMPI	EPHY	MUSC								
MI4	29AUG89	13:30	30AUG89	14:20	24:50	24H	3	4	7	0	0	17	0	0	0								
MI4	29AUG89	13:30	30AUG89	14:20	24:50	24H	4	4	8	0	0	3	0	0	0								
MI4	12SEP89	10:00	13SEP89	9:15	23:15	24H	1	4	12	0	0	0	0	0	1								
MI4	12SEP89	10:00	13SEP89	9:15	23:15	24H	2	4	28	0	0	0	0	1	0								
MI4	12SEP89	10:00	13SEP89	9:15	23:15	24H	3	4	30	0	0	0	0	1	0								
MI4	12SEP89	10:00	13SEP89	9:15	23:15	24H	4	4	9	0	0	0	0	0	0								
MUSL	PHOR	PSYC	SCAT	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	CEPH	DIAP	ENCY	EULO	ICHN	MYMA	HYAD	PTER	SCEL	CARA	CIID	COCC	ELAT	HIST
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LATH	SALP	SCOL	STAP	APHI	CERC	CICA	DELP	PSYL	HDPS	HDTI	LEPI	LEPT	SMIN	COEN	LYGA	SALD	THRI	ACAR	ARAN	GAST	TOTAL		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24		
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	34		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34		
0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	14		

Table 4. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI	
AN2	04MAY89	13:00	05MAY89	12:15	23:15	24H	1	5	3	0	0	0	0	0	0	0	
AN2	04MAY89	13:00	05MAY89	12:15	23:15	24H	2	5	1	0	1	0	0	0	0	0	
AN2	04MAY89	13:00	05MAY89	12:15	23:15	24H	3	5	0	0	0	0	0	0	0	0	
AN2	04MAY89	13:00	05MAY89	12:15	23:15	24H	4	5	3	0	0	0	0	0	0	0	
AN2	04MAY89	13:00	05MAY89	12:15	23:15	24H	5	5	3	0	0	0	0	0	0	0	
AN2	07JUN89	12:25	08JUN89	12:55	24:30	NQ	1	5	78	0	17	0	0	0	0	1	0
AN2	07JUN89	12:25	08JUN89	12:55	24:30	NQ	2	5	70	0	7	0	0	0	0	0	0
AN2	07JUN89	12:25	08JUN89	12:55	24:30	NQ	3	5	51	0	6	0	0	0	0	0	0
AN2	07JUN89	12:25	08JUN89	12:55	24:30	NQ	4	5	21	0	2	0	0	0	0	0	0
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA	PLAT
MUSL	MYCE	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA	PLAT	PTER	SCEL			
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP	TOTAL
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
0	0	1	1	0	4	2	0	0	0	0	0	0	0	0	0	109	
0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	79	
0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	65	
0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	29	

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI			
AN2	07JUN89	12:25	08JUN89	12:55	24:30	NQ	5	5	96	0	12	0	0	0	0	0			
AN2	08JUN89	13:25	09JUN89	13:10	23:45	24H	1	5	72	0	2	0	0	0	0	0			
AN2	08JUN89	13:25	09JUN89	13:10	23:45	24H	2	5	98	0	9	2	0	0	0	0			
AN2	08JUN89	13:25	09JUN89	13:10	23:45	24H	3	5	107	0	0	0	0	0	0	0			
AN2	08JUN89	13:25	09JUN89	13:10	23:45	24H	4	5	48	0	0	0	0	0	0	0			
AN2	08JUN89	13:25	09JUN89	13:10	23:45	24H	5	5	60	0	1	0	0	0	0	0			
AN2	22JUN89	11:25	23JUN89	11:35	24:10	24H	1	5	79	0	0	1	0	1	0	0			
AN2	22JUN89	11:25	23JUN89	11:35	24:10	24H	2	5	60	0	2	0	0	0	0	0			
AN2	22JUN89	11:25	23JUN89	11:35	24:10	24H	3	5	36	0	0	0	0	0	0	0			
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA	PLAT	PTER	SCEL
2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
6	1	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP	TOTAL		
0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	143		
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	78		
0	0	0	0	0	16	1	0	0	0	0	0	0	0	0	0	0	126		
0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	131		
0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	75		
0	0	0	0	0	35	0	0	0	0	0	0	0	0	1	0	0	98		
0	0	0	0	0	47	6	0	0	0	0	0	0	0	0	0	0	154		
0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	105		
0	0	0	0	0	17	2	0	0	0	0	0	0	2	0	0	0	70		

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI
AN2	22JUN89	11:25	23JUN89	11:35	24:10	24H	4	5	42	0	0	0	0	0	0	0
AN2	22JUN89	11:25	23JUN89	11:35	24:10	24H	5	5	39	0	3	0	0	0	0	0
AN2	06JUL89	15:50	07JUL89	13:30	21:40	24H	1	5	100	0	0	0	2	0	0	0
AN2	06JUL89	15:50	07JUL89	13:30	21:40	24H	2	5	82	0	2	0	0	0	0	0
AN2	06JUL89	15:50	07JUL89	13:30	21:40	24H	3	5	78	0	0	0	0	0	1	0
AN2	06JUL89	15:50	07JUL89	13:30	21:40	24H	4	5	128	0	0	0	0	0	0	0
AN2	06JUL89	15:50	07JUL89	13:30	21:40	24H	5	5	98	0	2	0	2	0	0	0
AN2	19JUL89	8:05	20JUL89	8:50	24:45	24H	1	5	43	0	26	0	0	1	0	0
AN2	19JUL89	8:05	20JUL89	8:50	24:45	24H	2	5	26	0	18	0	0	0	0	0
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA
4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0
0	0	5	2	0	0	0	0	0	0	0	1	0	0	0	0	0
5	1	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7	2	9	0	0	0	0	0	0	0	0	2	0	0	0	0	0
5	3	11	0	0	0	0	0	0	0	0	1	0	0	0	0	0
8	1	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0
3	1	2	0	0	0	0	0	1	0	0	3	0	0	0	0	1
1	2	1	0	0	0	0	0	0	0	0	12	0	0	0	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP
0	0	0	0	0	21	3	0	0	0	0	0	0	0	0	0	72
0	0	0	0	0	51	1	0	0	0	0	0	0	0	0	0	101
0	0	1	0	0	21	0	0	0	0	0	0	0	0	0	0	132
0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	105
0	0	0	0	0	6	0	0	1	0	0	0	0	0	0	0	106
0	0	0	0	0	11	0	0	0	0	0	0	0	0	1	0	160
0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	128
0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	84
0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	64

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI
AN2	19JUL89	8:05	20JUL89	8:50	24:45	24H	3	5	.	.	.	.	.	.	.	.
AN2	19JUL89	8:05	20JUL89	8:50	24:45	24H	4	5	53	0	25	0	0	0	0	0
AN2	19JUL89	8:05	20JUL89	8:50	24:45	24H	5	5	54	0	40	0	0	0	0	0
AN2	17AUG89	11:00	18AUG89	13:00	26:00	24H	1	5	2	0	0	0	0	0	0	0
AN2	17AUG89	11:00	18AUG89	13:00	26:00	24H	2	5	5	0	9	0	0	0	0	0
AN2	17AUG89	11:00	18AUG89	13:00	26:00	24H	3	5	4	0	15	0	0	0	0	0
AN2	17AUG89	11:00	18AUG89	13:00	26:00	24H	4	5	3	0	7	0	0	0	0	0
AN2	17AUG89	11:00	18AUG89	13:00	26:00	24H	5	5	3	0	8	0	0	0	0	0
AN2	13SEP89	14:30	14SEP89	14:20	23:50	24H	1	5	19	0	0	0	0	0	0	0
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	1	0	0	0	0	0	0	0	1	0	0	7	0	0	0	0
0	0	2	0	1	0	0	0	0	0	0	0	1	0	0	0	0
3	1	1	0	0	0	0	0	0	0	0	10	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	16	1	0	0	0	3
4	1	0	0	0	0	0	0	0	0	0	10	2	0	0	0	0
1	3	1	0	0	0	0	0	1	0	0	0	8	0	0	3	0
0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0
0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	90
0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	101
0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	20
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	40
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	SET REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI	
AN2	13SEP89	14:30	14SEP89	14:20	23:50	24H	2	5	20	0	1	0	0	1	0	0	
AN2	13SEP89	14:30	14SEP89	14:20	23:50	24H	3	5	18	0	4	0	0	0	0	0	
AN2	13SEP89	14:30	14SEP89	14:20	23:50	24H	4	5	24	0	3	0	0	0	0	0	
AN2	13SEP89	14:30	14SEP89	14:20	23:50	24H	5	5	13	0	2	0	0	0	0	0	
PBR	04MAY89	12:00	05MAY89	11:00	23:00	24H	1	6	1	0	0	0	0	0	0	0	
PBR	04MAY89	12:00	05MAY89	11:00	23:00	24H	2	6	1	0	1	0	0	0	0	0	
PBR	04MAY89	12:00	05MAY89	11:00	23:00	24H	3	6	1	0	1	0	0	0	0	0	
PBR	04MAY89	12:00	05MAY89	11:00	23:00	24H	4	6	0	0	1	0	0	0	0	0	
PBR	04MAY89	12:00	05MAY89	11:20	23:20	24H	5	6	0	0	1	0	0	0	0	0	
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA	
1	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	
1	0	2	0	0	0	0	0	0	0	0	2	1	0	0	0	0	
1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	
0	0	3	0	0	0	0	0	0	0	0	3	1	0	0	1	0	
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP	TOTAL
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	29	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	
0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	25	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	SET REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI			
PBR	04MAY89	12:00	05MAY89	11:20	23:20	24H	6	6	0	0	0	0	0	0	0	0			
PBR	07JUN89	10:55	08JUN89	11:35	24:40	24H	1	5	5	0	1	0	0	0	0	0			
PBR	07JUN89	10:55	08JUN89	11:35	24:40	24H	2	5	2	0	1	0	0	0	0	0			
PBR	07JUN89	10:55	08JUN89	11:35	24:40	24H	3	5	8	0	2	0	0	0	0	0			
PBR	07JUN89	10:55	08JUN89	11:35	24:40	24H	4	5	4	0	0	0	0	0	0	0			
PBR	07JUN89	10:55	08JUN89	11:35	24:40	24H	5	5	2	0	2	0	0	0	0	0			
PBR	08JUN89	11:50	09JUN89	12:45	24:55	24H	1	5	7	2	0	0	0	0	0	0			
PBR	08JUN89	11:50	09JUN89	12:45	24:55	24H	2	5	.	.	.	.	.	.	.	.			
PBR	08JUN89	11:50	09JUN89	12:45	24:55	24H	3	5	3	0	1	0	0	0	0	0			
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA	PLAT	PTER	SCEL
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP	TOTAL		
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7		
0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	8		
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	12		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9		
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4		

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	SET REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI
PBR	08JUN89	11:50	09JUN89	12:45	24:55	24H	4	5	4	0	2	0	0	0	0	0
PBR	08JUN89	11:50	09JUN89	12:45	24:55	24H	5	5	10	0	0	0	0	0	0	0
PBR	22JUN89	10:30	23JUN89	11:05	24:35	24H	1	5	6	0	1	0	0	0	0	0
PBR	22JUN89	10:30	23JUN89	11:05	24:35	24H	2	5	4	3	0	0	0	0	0	0
PBR	22JUN89	10:30	23JUN89	11:05	24:35	24H	3	5	9	1	1	0	0	0	0	1
PBR	22JUN89	10:30	23JUN89	11:05	24:35	24H	4	5	3	0	0	0	0	0	0	0
PBR	22JUN89	10:30	23JUN89	11:05	24:35	24H	5	5	1	2	0	0	0	0	0	0
PBR	06JUL89	14:30	07JUL89	14:40	24:10	24H	1	5	19	6	27	0	0	0	0	0
PBR	06JUL89	14:30	07JUL89	14:40	24:10	24H	2	5	7	6	14	0	0	0	0	0
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	SET REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI
PBR	06JUL89	14:30	07JUL89	14:40	24:10	24H	3	5	6	2	4	0	0	0	0	0
PBR	06JUL89	14:30	07JUL89	14:40	24:10	24H	4	5	10	2	54	0	0	0	0	0
PBR	06JUL89	14:30	07JUL89	14:40	24:10	24H	5	5	6	2	21	0	0	0	0	0
PBR	19JUL89	8:30	20JUL89	10:10	25:40	24H	1	5	43	2	59	0	0	0	0	0
PBR	19JUL89	8:30	20JUL89	10:10	25:40	24H	2	5	51	1	58	0	0	0	0	0
PBR	19JUL89	8:30	20JUL89	10:10	25:40	24H	3	5	59	0	49	0	0	0	0	0
PBR	19JUL89	8:30	20JUL89	10:10	25:40	24H	4	5	70	0	46	0	0	0	0	0
PBR	19JUL89	8:30	20JUL89	10:10	25:40	24H	5	5	31	2	82	0	0	0	0	0
PBR	17AUG89	10:25	18AUG89	10:50	24:25	24H	1	5	7	0	13	0	0	0	0	0
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	0	0	2	0	0	1	0	0	0	1
0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
0	0	4	0	0	0	0	0	0	1	0	0	2	0	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0	9	0	0	1	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP
0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	14
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	30
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	114
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116
0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	120
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	135
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	22

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI
PBR	17AUG89	10:25	18AUG89	10:50	24:25	24H	2	5	0	0	1	0	0	0	0	0
PBR	17AUG89	10:25	18AUG89	10:50	24:25	24H	3	5	17	0	2	0	0	0	0	0
PBR	17AUG89	10:25	18AUG89	10:50	24:25	24H	4	5	9	1	7	0	0	0	0	0
PBR	17AUG89	10:25	18AUG89	10:50	24:25	24H	5	5	10	0	2	0	0	0	0	0
PBR	13SEP89	13:40	14SEP89	15:30	25:50	24H	1	5	22	0	0	0	0	0	0	0
PBR	13SEP89	13:40	14SEP89	15:30	25:50	24H	2	5	41	0	0	0	0	1	0	0
PBR	13SEP89	13:40	14SEP89	15:30	25:50	24H	3	5	14	0	0	0	0	0	0	0
PBR	13SEP89	13:40	14SEP89	15:30	25:50	24H	4	5	31	0	0	0	0	0	0	0
PBR	13SEP89	13:40	14SEP89	15:30	25:50	24H	5	5	28	0	0	0	0	0	0	0
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
3	0	8	0	0	0	0	0	0	0	0	8	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	14
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	25
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	32

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	SET REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI
PIC	04MAY89	12:30	05MAY89	11:40	23:10	24H	1	5	9	0	102	0	0	0	0	0
PIC	04MAY89	12:30	05MAY89	11:40	23:10	24H	2	5	20	0	86	0	0	0	0	0
PIC	04MAY89	12:30	05MAY89	11:40	23:10	24H	3	5	2	0	40	0	0	0	0	0
PIC	04MAY89	12:30	05MAY89	11:40	23:10	24H	4	5	21	0	29	0	0	0	0	0
PIC	04MAY89	12:30	05MAY89	11:40	23:10	24H	5	5	30	0	3	0	0	0	0	0
PIC	07JUN89	12:00	08JUN89	12:05	24:05	NQ	1	5	57	0	0	0	0	0	0	0
PIC	07JUN89	12:00	08JUN89	12:05	24:05	NQ	2	5	136	0	0	0	0	0	0	0
PIC	07JUN89	12:00	08JUN89	12:05	24:05	NQ	3	5	143	0	0	0	0	0	0	0
PIC	07JUN89	12:00	08JUN89	12:05	24:05	NQ	4	5	307	0	0	0	0	0	0	0
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA
0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	4	0	0	0	0	0	1	0	0	0	2	0
0	0	1	1	0	1	0	0	0	0	0	0	2	1	0	0	0
0	1	1	0	1	0	0	0	0	1	1	0	0	2	0	1	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP
0	0	0	0	1	5	7	0	0	0	5	0	0	0	1	0	132
0	0	0	0	0	4	2	0	0	0	0	0	0	2	0	0	115
0	0	1	0	0	4	7	0	0	0	0	0	0	0	0	0	56
0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	65
0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	42
0	0	0	0	0	148	0	0	0	0	0	0	0	1	0	0	213
0	0	0	0	0	624	9	0	0	0	0	0	1	0	3	1	0
0	0	0	0	0	723	10	0	0	0	0	0	0	0	2	0	0
0	0	0	0	0	904	10	0	0	0	0	0	0	0	0	0	1222

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI			
PIC	07JUN89	12:00	08JUN89	12:05	24:05	NQ	5	5	151	0	0	0	0	0	0	0			
PIC	08JUN89	12:40	09JUN89	12:05	23:25	24H	1	5	67	0	0	0	0	0	0	0			
PIC	08JUN89	12:40	09JUN89	12:05	23:25	24H	2	5	147	0	0	0	0	0	0	0			
PIC	08JUN89	12:40	09JUN89	12:05	23:25	24H	3	5	113	0	0	1	0	0	0	0			
PIC	08JUN89	12:40	09JUN89	12:05	23:25	24H	4	5	99	0	0	1	0	0	0	0			
PIC	08JUN89	12:40	09JUN89	12:05	23:25	24H	5	5	166	0	0	0	0	0	0	0			
PIC	22JUN89	10:55	23JUN89	10:30	23:35	24H	1	5	54	0	0	0	0	0	0	0			
PIC	22JUN89	10:55	23JUN89	10:30	23:35	24H	2	5	56	0	0	0	0	0	0	0			
PIC	22JUN89	10:55	23JUN89	10:30	23:35	24H	3	5	55	0	0	0	0	0	0	0			
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA	PLAT	PTER	SCEL
1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	3	0	1	0	0	0	0	0	0	0	0	0	0	1	0	10	0	0
1	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	6	0	0	0
2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	8	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP	TOTAL		
0	0	0	0	0	588	2	0	0	0	0	0	0	0	0	0	0	744		
0	0	1	0	0	118	2	0	0	0	0	0	0	1	0	0	0	193		
0	0	1	0	0	69	2	0	0	0	0	0	0	0	0	0	0	220		
0	0	0	0	0	132	5	0	0	0	0	0	0	3	2	0	0	260		
0	0	1	0	0	45	10	0	0	0	0	0	0	2	1	0	0	169		
0	0	0	0	0	34	3	0	0	0	0	0	0	0	0	0	0	206		
0	0	0	0	0	76	5	0	0	0	0	0	0	0	0	0	0	151		
0	0	1	0	0	31	0	0	0	0	0	0	0	0	0	0	0	103		
0	0	0	0	0	19	4	0	0	0	0	0	1	0	0	0	0	96		

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE SET	TIME DATE	SET OUT	REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI
PIC	22JUN89	10:55	23JUN89	10:30	23:35	24H	4	5	62	0	1	0	0	1	0	0
PIC	22JUN89	10:55	23JUN89	10:30	23:35	24H	5	5	43	0	0	0	0	2	0	0
PIC	06JUL89	14:15	07JUL89	14:10	23:55	24H	1	5	55	0	0	0	0	0	0	0
PIC	06JUL89	14:15	07JUL89	14:10	23:55	24H	2	5	37	0	2	0	0	0	0	0
PIC	06JUL89	14:15	07JUL89	14:10	23:55	24H	3	5	49	0	3	0	0	1	0	0
PIC	06JUL89	14:15	07JUL89	14:10	23:55	24H	4	5	76	0	6	0	0	0	0	0
PIC	06JUL89	14:15	07JUL89	14:10	23:55	24H	5	5	39	0	0	0	0	0	0	0
PIC	19JUL89	8:15	20JUL89	9:30	25:15	24H	1	5	9	1	5	0	0	0	0	1
PIC	19JUL89	8:15	20JUL89	9:30	25:15	24H	2	5	11	0	2	0	0	0	0	0
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA
1	0	5	0	1	0	0	0	0	0	0	0	0	0	0	6	0
1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	8	0
0	0	6	0	1	0	0	0	0	0	0	0	0	0	1	0	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
0	0	11	1	0	0	0	0	0	0	0	3	1	0	0	2	0
1	0	7	1	0	0	0	0	0	0	0	0	0	0	1	1	0
1	0	2	0	0	0	0	0	0	0	0	1	0	0	0	4	0
1	0	7	0	0	0	0	0	1	0	0	2	2	3	2	0	2
0	0	6	0	0	1	0	0	0	0	0	0	2	1	2	0	0
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP
0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	128
0	0	0	0	0	106	2	0	0	0	0	0	1	0	0	0	167
0	0	0	0	0	6	4	0	5	0	0	0	0	0	0	0	80
0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	45
0	0	0	0	0	0	4	0	7	0	0	0	0	1	0	0	84
0	0	0	0	0	0	2	0	5	0	0	0	0	0	0	0	100
0	0	0	0	0	3	1	0	5	0	0	0	0	0	0	0	56
0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	43
0	0	1	0	0	0	2	0	1	0	0	0	0	3	3	0	35

Table 4 continued. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI	
PIC	19JUL89	8:15	20JUL89	9:30	25:15	24H	3	5	12	0	0	0	0	0	0	0	
PIC	19JUL89	8:15	20JUL89	9:30	25:15	24H	4	5	3	0	4	0	0	0	0	0	
PIC	19JUL89	8:15	20JUL89	9:30	25:15	24H	5	5	6	0	2	0	0	0	0	0	
PIC	17AUG89	10:45	18AUG89	11:55	25:10	24H	1	5	2	0	1	0	0	0	2	0	
PIC	17AUG89	10:45	18AUG89	11:55	25:10	24H	2	5	3	0	0	0	0	0	0	0	
PIC	17AUG89	10:45	18AUG89	11:55	25:10	24H	3	5	0	0	9	0	0	0	0	0	
PIC	17AUG89	10:45	18AUG89	11:55	25:10	24H	4	5	0	0	3	0	0	0	1	0	
PIC	17AUG89	10:45	18AUG89	11:55	25:10	24H	5	5	3	0	2	0	0	0	0	0	
PIC	13SEP89	14:00	14SEP89	14:55	24:55	24H	1	5	0	0	1	0	0	0	0	0	
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA	
1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	3	0	0	0	0	0	1	0	0	1	0	1	1	0	0	
0	0	4	0	0	0	0	0	0	0	0	1	1	0	0	1	2	
0	0	4	0	1	0	0	0	0	0	0	2	2	0	0	6	0	
2	0	3	0	0	0	0	0	0	0	0	1	1	0	0	23	1	
3	0	5	0	0	0	0	1	1	1	0	3	1	0	0	29	0	
1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	
1	0	5	0	0	0	0	0	1	0	0	5	1	0	0	25	1	
0	0	7	0	0	0	1	0	0	0	3	0	0	0	1	0	0	
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP	TOTAL
0	0	0	0	0	0	7	0	1	0	0	0	0	1	0	0	24	
0	0	0	0	0	0	2	0	1	0	0	0	0	1	0	0	20	
0	0	0	0	1	1	5	0	0	0	0	0	0	0	4	0	28	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	38	
1	0	0	0	0	0	10	0	0	0	0	0	0	2	0	0	72	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
0	0	0	0	1	2	0	0	0	0	0	0	0	1	0	0	49	
0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	19	

Table 4 concluded. Annacis Channel Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	SET REP	REPS	CHIA	CHIP	CERA	CERP	CERL	DIAD	CECI	CHLR	CULI			
PIC	13SEP89	14:00	14SEP89	14:55	24:55	24H	2	5	0	0	0	0	0	0	0	0			
PIC	13SEP89	14:00	14SEP89	14:55	24:55	24H	3	5	1	0	0	0	0	0	0	0			
PIC	13SEP89	14:00	14SEP89	14:55	24:55	24H	4	5	2	0	2	0	0	0	0	0			
PIC	13SEP89	14:00	14SEP89	14:55	24:55	24H	5	5	3	0	0	0	0	0	0	1			
DOLI	EMPI	EPHY	MUSC	MUSL	MYCE	PSYC	SCIA	SCMY	SPHA	SYRP	TIPU	BRAC	EULO	EURY	ICHN	MYMA	PLAT	PTER	SCEL
0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	1	0	1	0	
0	0	8	0	0	0	0	1	0	0	0	6	2	0	0	1	0	2	0	
1	0	12	0	0	0	0	0	0	0	0	6	0	0	0	2	1	0	0	
0	0	6	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	
TRIC	CARA	CHRY	CIID	STAP	APHI	CICA	DELP	HDPS	POLY	PIER	SALD	THRI	ACAR	ARAN	GAST	ISOP	TOTAL		
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	7			
0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	23			
0	0	0	0	0	5	0	0	0	0	0	0	1	0	0	0	32			
0	0	0	0	0	0	0	0	1	0	0	1	1	3	0	0	19			

Table 5. Campbell River Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

Table 5 continued. Campbell River Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	SET	REP	REPS	CHIA	CERA	CHLR
NUN	24MAY89	8:52	24MAY89	18:17	9:25	DRY	5	5	270	0	0
IS3	24MAY89	9:35	24MAY89	17:25	7:50	DRY	1	5	93	0	0
IS3	24MAY89	9:35	24MAY89	17:25	7:50	DRY	2	5	22	9	0
IS3	24MAY89	9:35	24MAY89	17:25	7:50	DRY	3	5	91	0	0
IS3	24MAY89	9:35	24MAY89	17:25	7:50	DRY	4	5	145	1	0
IS3	24MAY89	9:35	24MAY89	17:25	7:50	DRY	5	5	68	0	0
IS1	24MAY89	18:08	25MAY89	8:07	13:59	WET	1	5	1	0	0
IS1	24MAY89	18:08	25MAY89	8:07	13:59	WET	2	5	1	0	0
IS1	24MAY89	18:08	25MAY89	8:07	13:59	WET	3	5	2	0	0
IS1	24MAY89	18:08	25MAY89	8:07	13:59	WET	4	5	4	0	0
IS1	24MAY89	18:08	25MAY89	8:07	13:59	WET	5	5	0	1	0
NUN	24MAY89	18:45	25MAY89	8:30	13:45	WET	1	5	0	0	0
NUN	24MAY89	18:45	25MAY89	8:30	13:45	WET	2	5	2	5	0
NUN	24MAY89	18:45	25MAY89	8:30	13:45	WET	3	5	3	0	0
NUN	24MAY89	18:45	25MAY89	8:30	13:45	WET	4	5	0	0	0
NUN	24MAY89	18:45	25MAY89	8:30	13:45	WET	5	5	1	0	0
IS3	24MAY89	17:40	25MAY89	8:58	15:18	WET	1	5	1	0	0
IS3	24MAY89	17:40	25MAY89	8:58	15:18	WET	2	5	1	0	0
IS3	24MAY89	17:40	25MAY89	8:58	15:18	WET	3	5	2	0	0
IS3	24MAY89	17:40	25MAY89	8:58	15:18	WET	4	5	1	0	0
IS3	24MAY89	17:40	25MAY89	8:58	15:18	WET	5	5	4	0	0
NUN	25MAY89	8:35	25MAY89	11:25	2:50	IND	A1	7	43	0	0
NUN	25MAY89	8:35	25MAY89	11:25	2:50	IND	B1	7	1	0	0
NUN	25MAY89	8:35	25MAY89	11:25	2:50	IND	1	7	17	0	0

DOLI EPHY MUSC SCMY TIPIU CARA CHRY CURC ELAT ACAR ARAN ISOP NEMO TOTAL

Table 5 continued. Campbell River Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>) .

SAMPLE SITE	DATE SET	TIME SET	SAMPLE DATE	TIME OUT	SET LENGTH	IND	2	7	22	1	0	CHIA	CERA	CHLR
NUN	25MAY89	8:35	25MAY89	11:25	2:50	IND	2	7	22	1	0			
NUN	25MAY89	8:35	25MAY89	11:25	2:50	IND	3	7	7	1	0			
NUN	25MAY89	8:35	25MAY89	11:25	2:50	IND	4	7	36	0	0			
NUN	25MAY89	8:35	25MAY89	11:25	2:50	IND	5	7	82	0	0			
NUN	25MAY89	11:30	25MAY89	14:35	3:05	IND	A1	7	2	0	0			
NUN	25MAY89	11:30	25MAY89	14:35	3:05	IND	B1	7	0	0	0			
NUN	25MAY89	11:30	25MAY89	14:35	3:05	IND	1	7	1	0	0			
NUN	25MAY89	11:30	25MAY89	14:35	3:05	IND	2	7	6	1	0			
NUN	25MAY89	11:30	25MAY89	14:35	3:05	IND	3	7	0	0	0			
NUN	25MAY89	11:30	25MAY89	14:35	3:05	IND	4	7	0	0	0			
NUN	25MAY89	11:30	25MAY89	14:35	3:05	IND	5	7	0	0	0			
NUN	25MAY89	14:45	25MAY89	17:35	2:50	IND	A1	7	2	0	0			
NUN	25MAY89	14:45	25MAY89	17:35	2:50	IND	B1	7	0	0	0			
NUN	25MAY89	14:45	25MAY89	17:35	2:50	IND	1	7	2	0	0			
NUN	25MAY89	14:45	25MAY89	17:35	2:50	IND	2	7	2	0	0			
NUN	25MAY89	14:45	25MAY89	17:35	2:50	IND	3	7	0	0	0			
NUN	25MAY89	14:45	25MAY89	17:35	2:50	IND	4	7	4	1	0			
NUN	25MAY89	14:45	25MAY89	17:35	2:50	IND	5	7	1	0	0			
NUN	25MAY89	17:45	25MAY89	20:30	2:45	INW	A1	7	4	2	0			
NUN	25MAY89	17:45	25MAY89	20:30	2:45	INW	B1	7	2	0	0			
NUN	25MAY89	17:45	25MAY89	20:30	2:45	INW	1	7	12	3	0			
NUN	25MAY89	17:45	25MAY89	20:30	2:45	INW	2	7	2	0	0			
NUN	25MAY89	17:45	25MAY89	20:30	2:45	INW	3	7	13	2	0			
NUN	25MAY89	17:45	25MAY89	20:30	2:45	INW	4	7	2	0	0			
3	0	0	0	0	0	0	0	0	0	0	0		26	
2	1	0	0	0	0	0	0	0	0	0	0		11	
2	0	0	0	0	0	0	0	0	0	0	0		38	
7	0	0	0	1	0	0	0	0	5	0	0		95	
0	0	0	0	0	0	0	0	0	0	0	0		2	
0	0	0	0	0	0	0	0	0	0	0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0		1	
0	0	0	0	0	0	0	0	0	0	0	0		7	
0	0	0	0	0	0	0	0	0	0	0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0		3	
0	0	0	0	0	0	0	0	0	0	0	0		0	
1	0	0	0	0	0	0	0	0	1	0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0		2	
0	0	0	0	0	0	0	0	0	0	0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0		5	
0	0	0	0	0	0	0	0	0	0	0	0		1	
1	0	0	0	1	0	0	1	0	3	0	0		12	
0	0	0	0	0	0	0	0	0	0	0	0		2	
0	0	0	0	0	0	0	0	0	0	0	0		15	
2	0	0	0	0	1	0	0	0	0	0	0		5	
0	1	0	0	1	0	0	0	0	0	0	0		17	
0	2	0	0	0	0	0	0	0	0	0	0		4	

Table 5 concluded. Campbell River Emergent Insect Data, 1989.  
Insect Abundance by Taxa (no. • 0.5m<sup>-2</sup>).

Table 6. Emergent vegetation biomass sampled at Mitchell Island, Site 1 (MI1), Fraser River.  
August 16, 1989. Biomass expressed as g•0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4	
	Wet Wt.	Dry Wt.						
<i>Lythrum salicaria</i>							0.28	0.07
<i>Lilaeopsis occidentalis</i>	0.33	0.03	0.21	0.05			1.35	0.10
<i>Arnica amplexicaulis</i>			0.44	0.22				
<i>Alisma plantago-aquatica</i>			1.16	0.27				
<i>Juncus articulatus</i>			1.64	0.43			8.74	1.66
<i>Carex lyngbyei</i>	722.93	125.21	821.92	154.59	828.57	128.16	866.85	256.96
<i>Eleocharis palustris</i>			681.76	82.63	190.08	31.17	142.51	29.42
<i>Agrostis alba</i>	2.52	0.94			0.59	0.38		
<i>Phalaris arundinacea</i>							16.44	7.16
Unknown					0.08	0.04		
Total Biomass	725.78	126.18	1507.13	238.19	1019.32	159.75	1036.17	295.37

Table 7. Emergent vegetation biomass sampled at Mitchell Island, Site 2 (MI2), Fraser River. August 16, 1989. Biomass expressed as g·0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4	
	Wet Wt.	Dry Wt.						
<i>Callitriches sp.</i>	0.54	0.13			1.77	0.21	5.59	0.42
<i>Limosella aquatica</i>	0.83	0.13			1.24	0.12	0.88	0.09
<i>Juncus articulatus</i>							6.29	0.90
<i>Carex lyngbyei</i>							39.00	5.18
<i>Lemna minor</i>	1.35	0.24	1.44	0.13	19.00	2.44	5.75	1.19
Total Biomass	2.72	0.50	1.44	0.13	22.01	2.77	57.51	7.78

Table 8. Emergent vegetation biomass sampled at Mitchell Island, Site 3 (MI3), Fraser River. August 16, 1989. Biomass expressed as g·0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4	
	Wet Wt.	Dry Wt.						
<i>Lythrum salicaria</i>			26.12	6.40	17.28	2.95	28.46	5.68
<i>Alisma plantago-aquatica</i>	4.54	0.48	1.05	0.20				
<i>Triglochin maritimum</i>			7.84	0.80				
<i>Juncus ensifolius</i>					0.27	0.23		
<i>Carex lyngbyei</i>	1422.63	279.60	1040.74	196.70	1472.38	308.06	994.31	201.01
<i>Eleocharis ovata</i>					4.05	0.66		
<i>Eleocharis palustris</i>	13.90	2.13	33.12	5.40	10.39	2.00	28.75	4.17
<i>Scirpus acutus</i>	105.81	12.08	7.09	0.37	2.48	0.33		
Total Biomass	1546.88	294.29	1115.96	209.87	1506.85	314.23	1051.52	210.86

Table 9. Emergent vegetation biomass sampled at Mitchell Island, Site 4 (MI4), Fraser River. August 16, 1989. Biomass expressed as g•0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4	
	Wet Wt.	Dry Wt.						
<i>Lythrum salicaria</i>	13.51	3.39	13.64	3.67	62.12	15.22	68.84	19.71
<i>Alisma plantago-aquatica</i>					0.16	0.03		
<i>Sagittaria latifolia</i>	9.94	1.15						
<i>Triglochin maritimum</i>			1.53	0.12				
<i>Juncus articulatus</i>			3.87	0.43	1.18	0.15	3.00	0.40
<i>Juncus tenuis</i>					4.29	1.73		
<i>Carex lyngbyei</i>	516.43	105.15	509.07	96.33	72.43	13.69	13.21	4.00
<i>Eleocharis palustris</i>	139.88	21.14	85.93	10.07	3.49	0.57	3.55	0.45
<i>Agrostis alba</i>					7.97	2.28	27.23	3.79
Total Biomass	679.76	130.83	614.04	110.62	151.64	33.67	115.83	28.35

Table 10. Emergent vegetation biomass sampled at Annacis Island, Site 2 (AN2), Fraser River.  
August 18, 1989. Biomass expressed as g•0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4		REP. 5	
	Wet Wt.	Dry Wt.								
<i>Polygonum hydropiper</i>	9.43	2.49	6.56	1.09	4.73	1.06	7.00	1.02	2.67	0.28
<i>Lythrum salicaria</i>					8.14	2.54	51.93	11.59	7.65	2.00
<i>Lilaeopsis occidentalis</i>	8.96	1.28	2.17	0.17	27.22	2.93	10.18	1.05	8.00	1.13
<i>Sium suave</i>			38.61	4.86	34.86	5.59			16.83	2.00
<i>Aster subspicatus</i>	20.36	6.59	4.02	1.17						
<i>Alisma plantago-aquatica</i>	0.18	0.11	10.49	1.58	3.22	0.69	4.92	0.82	0.88	0.18
<i>Juncus articulatus</i>	44.75	9.87	1.51	0.36			49.76	5.00	3.00	0.43
<i>Juncus oxymeris</i>	78.55	26.57	380.01	57.00	253.39	50.88			681.93	110.09
<i>Carex lyngbyei</i>	205.11	61.72	186.25	46.50	219.25	55.77	217.93	54.34	88.28	28.81
<i>Eleocharis palustris</i>	55.43	8.68	9.00	1.42	28.82	6.98	46.61	6.62	26.50	6.79
<i>Agrostis alba</i>	201.14	66.28					57.14	11.68	11.12	4.00
<i>Deschampsia caespitosa</i>	12.39	4.02	3.38	1.28	2.44	1.12	0.45	0.20		
<i>Phalaris arundinacea</i>			287.67	102.51	158.02	64.66				
Total Biomass	636.30	187.61	929.67	217.94	740.09	192.22	445.92	92.32	846.86	155.71

Table 11. Emergent vegetation biomass sampled at Patrick Island (PIC), Fraser River.  
August 18, 1989. Biomass expressed as g•0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4		REP. 5	
	Wet Wt.	Dry Wt.								
<i>Equisetum fluviatile</i>	17.53	3.19								
<i>Polygonum hydropiper</i>					6.24	1.18			7.09	1.31
<i>Myosotis scorpioides</i>	8.46	1.99	40.97	8.92	26.00	4.34	35.85	9.03	19.81	4.37
<i>Arnica amplexicaulis</i>									4.83	1.41
<i>Alisma plantago-aquatica</i>	15.09	3.54	6.67	1.41	18.92	3.68			1.19	0.35
<i>Triglochin maritimum</i>									0.81	0.16
<i>Carex lyngbyei</i>	942.48	194.91	557.96	159.56	1025.00	241.20	982.26	221.70		
<i>Eleocharis palustris</i>	32.00	16.00	219.89	58.07	44.00	2.97	80.72	14.70	91.72	11.54
<i>Agrostis alba</i>	223.31	64.29	453.20	150.22	535.00	132.52	385.78	112.46	51.57	13.37
<i>Deschampsia caespitosa</i>							0.26	0.13		
<i>Sparganium angustifolium</i>			38.20	9.14					464.05	57.84
Unknown			11.86	1.86	4.79	0.72				
Total Biomass	1238.87	283.92	1328.75	389.18	1659.95	386.61	1484.87	358.02	641.07	90.35

Table 12. Emergent vegetation biomass sampled at Patrick Bay (PBR), Fraser River.  
August 18, 1989. Biomass expressed as g•0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4		REP. 5	
	Wet Wt.	Dry Wt.								
<i>Equisetum arvense</i>	1.09	0.40	4.73	2.31			1.28	0.42	2.61	0.41
<i>Polygonum hydropiper</i>	2.31	0.52	3.91	0.88	17.38	5.94	1.94	0.41	28.73	5.94
<i>Ranunculus repens</i>									0.20	0.09
<i>Ranunculus</i> sp.							0.20	0.02		
<i>Cardamine occidentalis</i>									2.17	0.20
<i>Callitrichie</i> sp.	10.91	1.31	14.91	1.79	13.20	2.02	9.27	0.98	15.30	1.74
<i>Lythrum salicaria</i>			0.49	0.12			0.81	0.11		
<i>Lilaeopsis occidentalis</i>	0.09	0.01	0.64	0.07	4.00	0.19	2.45	0.32	3.80	0.29
<i>Myosotis scorpioides</i>			0.98	0.98						
<i>Gratiola neglecta</i>							0.50	0.12	2.00	0.18
<i>Limosella aquatica</i>							0.02	0.01	0.05	0.01
<i>Alisma plantago-aquatica</i>									0.78	0.07
<i>Juncus articulatus</i>	16.37	2.08	136.22	17.30			95.76	9.61	170.39	20.43
<i>Eleocharis palustris</i>									1.72	0.09
<i>Agrostis alba</i>	0.98	0.28	9.96	2.85			4.12	0.74	1.40	0.15
Unknown							3.02	0.81		
Total Biomass	31.75	4.60	171.84	26.30	34.58	8.15	119.37	13.55	229.15	29.60

Table 13. Emergent vegetation biomass sampled at Nunn's Island (NUN), Campbell River. May 26, 1989. Biomass expressed as g•0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4		REP. 5	
	Wet Wt.	Dry Wt.								
<i>Potentilla pacifica</i>										
<i>Lilaeopsis occidentalis</i>										
<i>Triglochin maritimum</i>							130.63	13.41		
<i>Juncus balticus</i>			45.19	8.12			22.20	5.92	2.81	0.69
<i>Carex lyngbyei</i>	1608.21	236.35	1537.09	212.29	1875.32	302.68	1414.36	223.16	1848.94	291.75
<i>Eleocharis palustris</i>					1.15	0.18	16.80	2.61	4.60	0.68
<i>Deschampsia caespitosa</i>										
Total Biomass	1608.21	236.35	1582.28	220.41	1876.47	302.86	1583.99	245.10	1856.35	293.12

Plant Species	REP. A1		REP. B1	
	Wet Wt.	Dry Wt.	Wet Wt.	Dry Wt.
<i>Potentilla pacifica</i>	1.37	0.23	7.93	0.99
<i>Lilaeopsis occidentalis</i>			0.07	0.02
<i>Triglochin maritimum</i>				
<i>Juncus balticus</i>			4.75	1.30
<i>Carex lyngbyei</i>	1393.61	233.84	940.94	159.06
<i>Eleocharis palustris</i>	41.67	6.00	25.00	4.13
<i>Deschampsia caespitosa</i>			1.47	0.29
Total Biomass	1436.65	240.07	980.16	165.79

Table 14. Emergent vegetation biomass sampled at Island 1 (IS1), Campbell River.  
May 25, 1989. Biomass expressed as g•0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4		REP. 5	
	Wet Wt.	Dry Wt.								
<i>Potentilla pacifica</i>	11.06	1.73	119.55	16.26	6.04	0.92	14.88	2.65	42.55	9.78
<i>Juncus balticus</i>	22.30	7.22	340.20	93.79			198.33	64.19	15.38	5.65
<i>Juncus effusus</i>	3.30	0.45								
<i>Juncus sp.</i>	0.30	0.06								
<i>Carex lyngbyei</i>	689.27	146.96	238.91	49.00	680.61	146.02	520.56	112.25	83.24	23.53
<i>Eleocharis palustris</i>	48.88	8.70	27.04	4.68	1.24	0.22	3.52	0.94		
<i>Deschampsia caespitosa</i>					0.10	0.02			17.86	6.01
Total Biomass	775.11	165.12	725.70	163.73	687.99	147.18	737.29	180.03	159.03	44.97

Table 15. Emergent vegetation biomass sampled at Island 3 (IS3), Campbell River.  
 May 25, 1989. Biomass expressed as g•0.5m<sup>-2</sup>.

Plant Species	REP. 1		REP. 2		REP. 3		REP. 4		REP. 5	
	Wet Wt.	Dry Wt.								
<i>Potentilla pacifica</i>	0.15	0.04	0.44	0.06	0.02	0.01				
<i>Triglochin maritimum</i>	0.39	0.07			7.29	0.74				
<i>Juncus balticus</i>	54.36	16.52	0.69	0.17	10.30	2.83	115.38	29.49	44.17	12.80
<i>Carex lyngbyei</i>	544.07	109.31	463.79	78.00	1049.52	188.56	566.85	97.35	655.89	107.57
<i>Eleocharis palustris</i>	31.31	5.22	55.90	8.00	8.78	1.42	22.70	3.56	5.81	1.11
<i>Scirpus americanus</i>	11.41	2.00	20.57	2.81	6.75	0.97			0.41	0.11
Total Biomass	641.69	133.16	541.39	89.04	1082.66	194.53	704.93	130.41	706.28	121.59

Figure 1. Location of Lower Fraser River study sites.

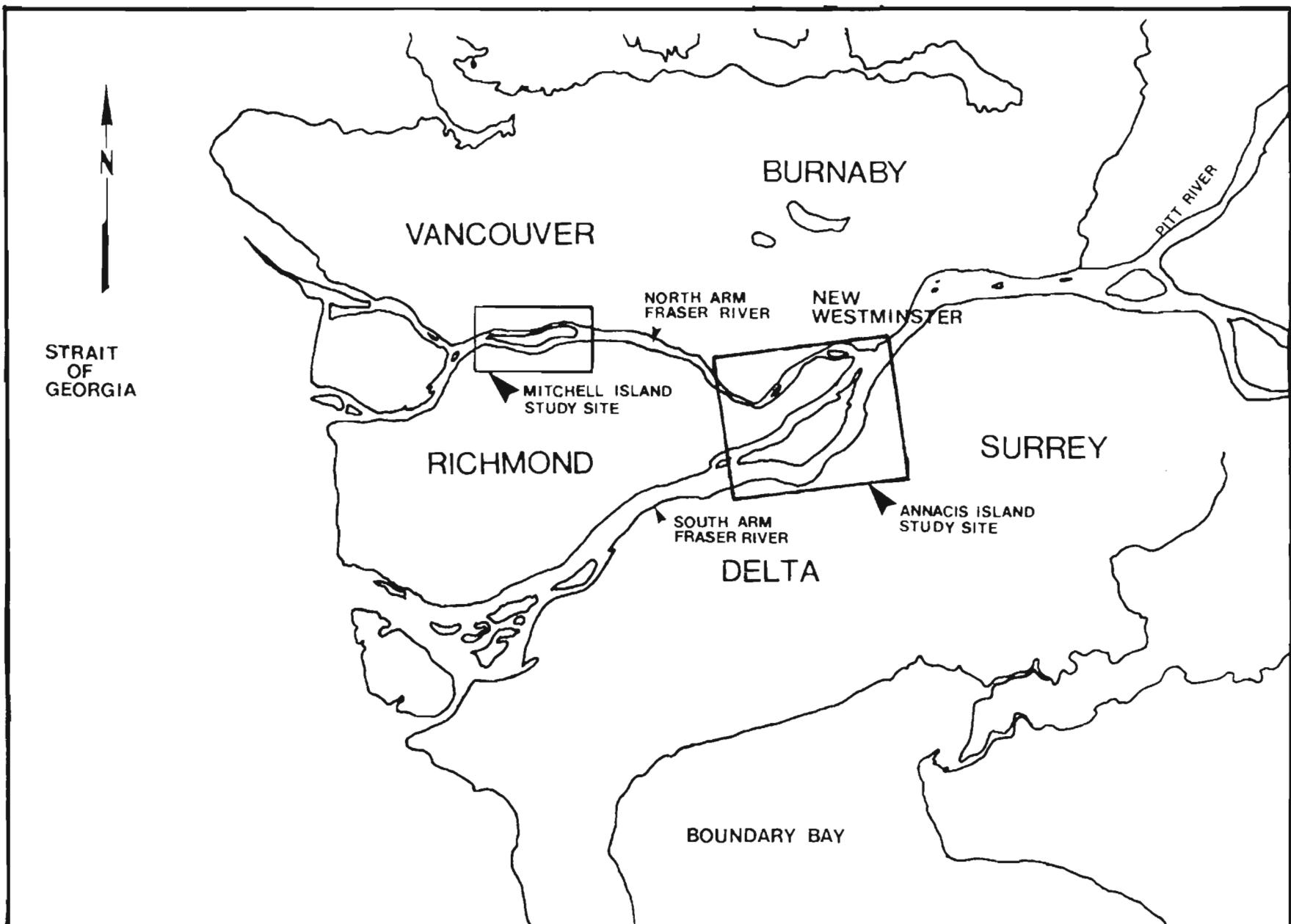


Figure 2. Location of Campbell River estuary study sites.

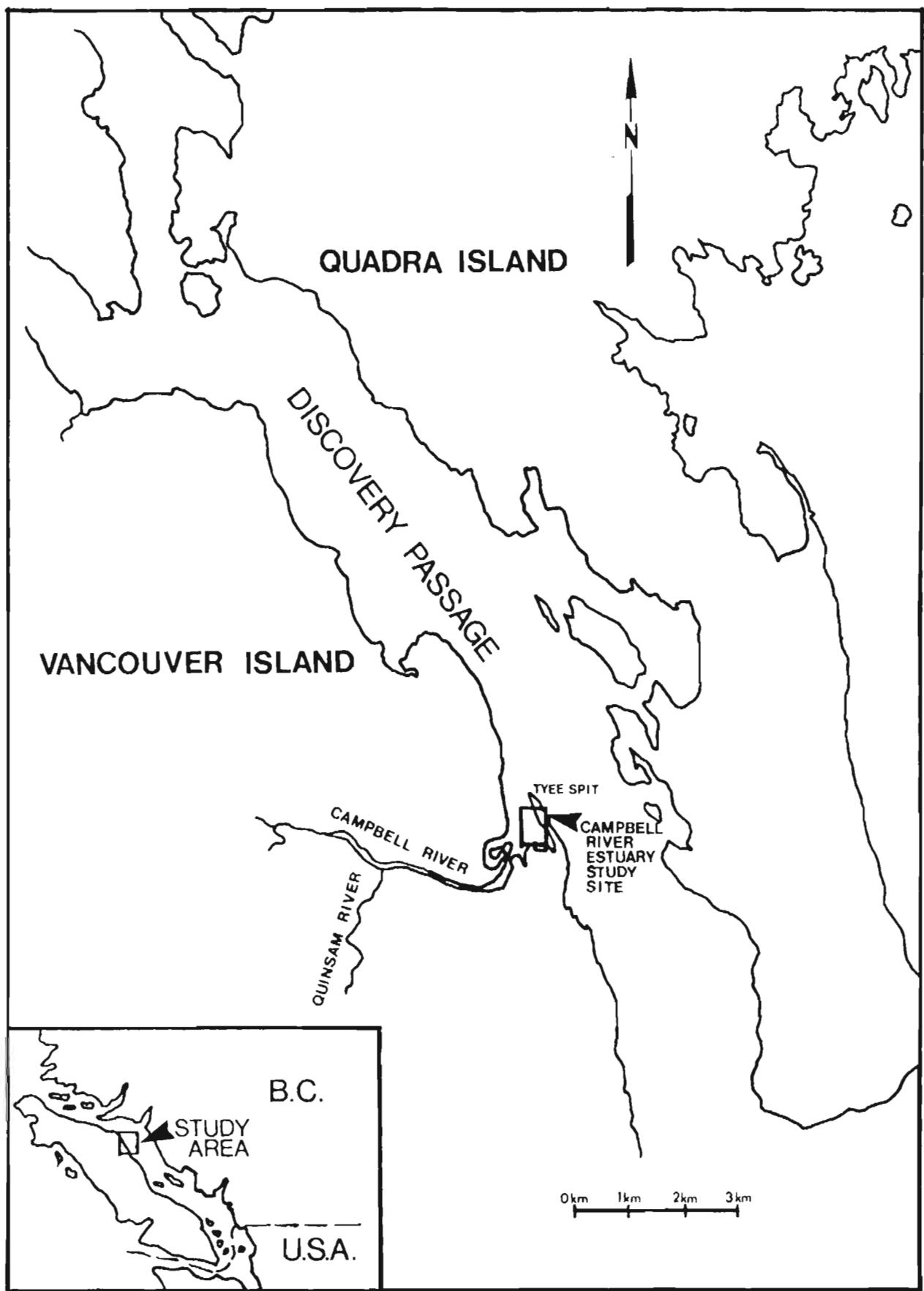


Figure 3. Mitchell Island study sites.

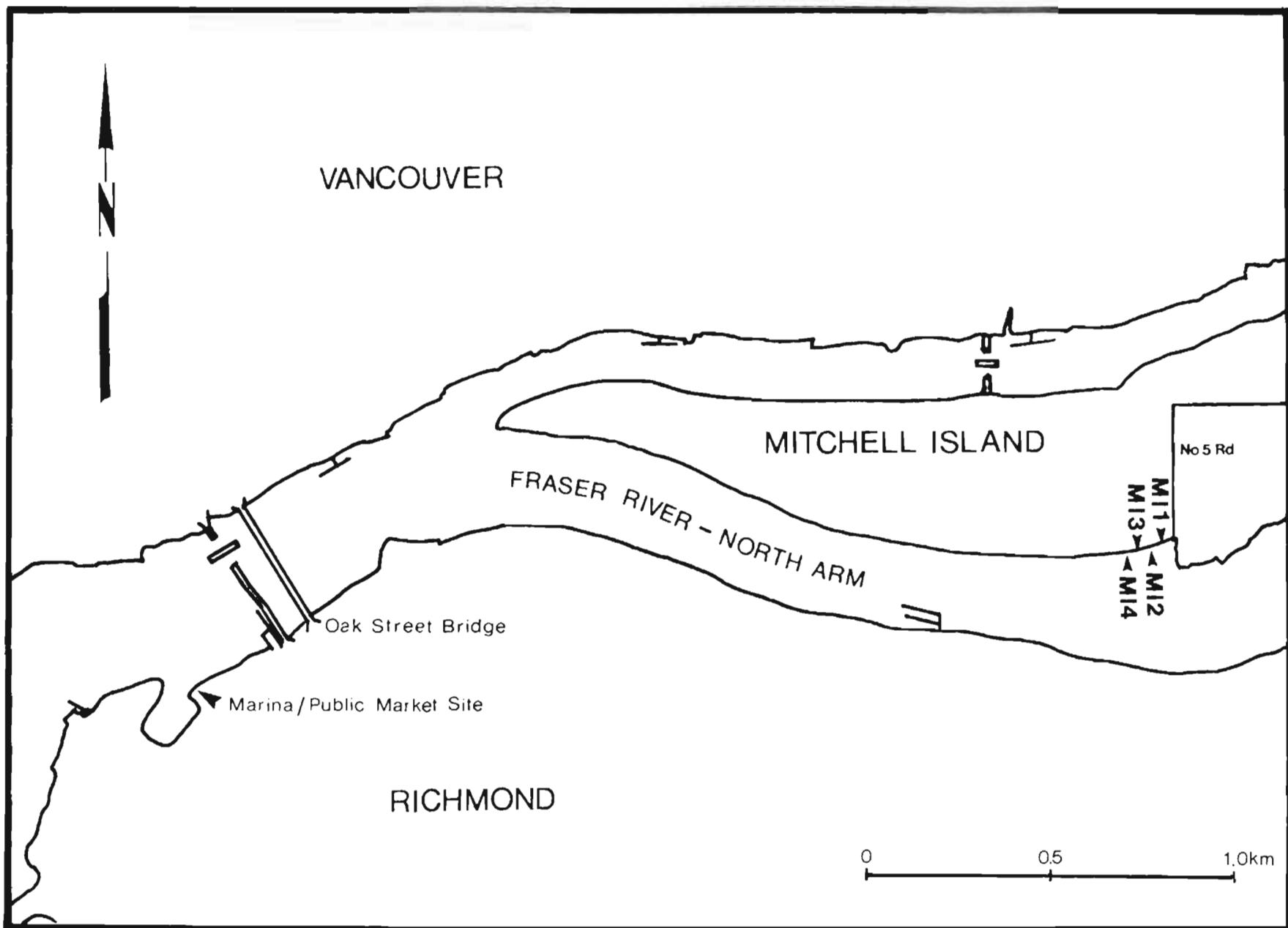


Figure 4. Annacis Channel study sites.

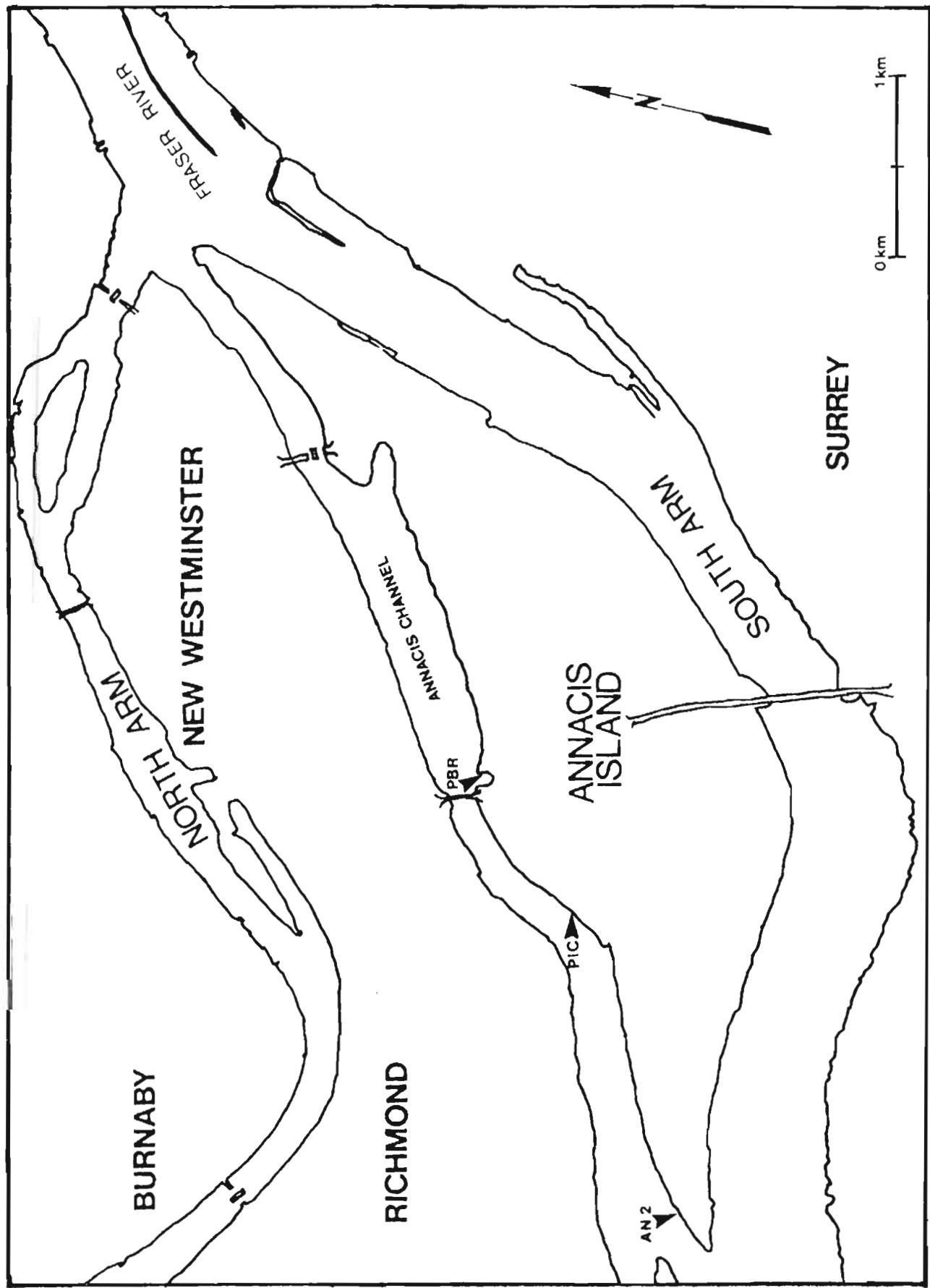


Figure 5. Campbell River estuary study sites.

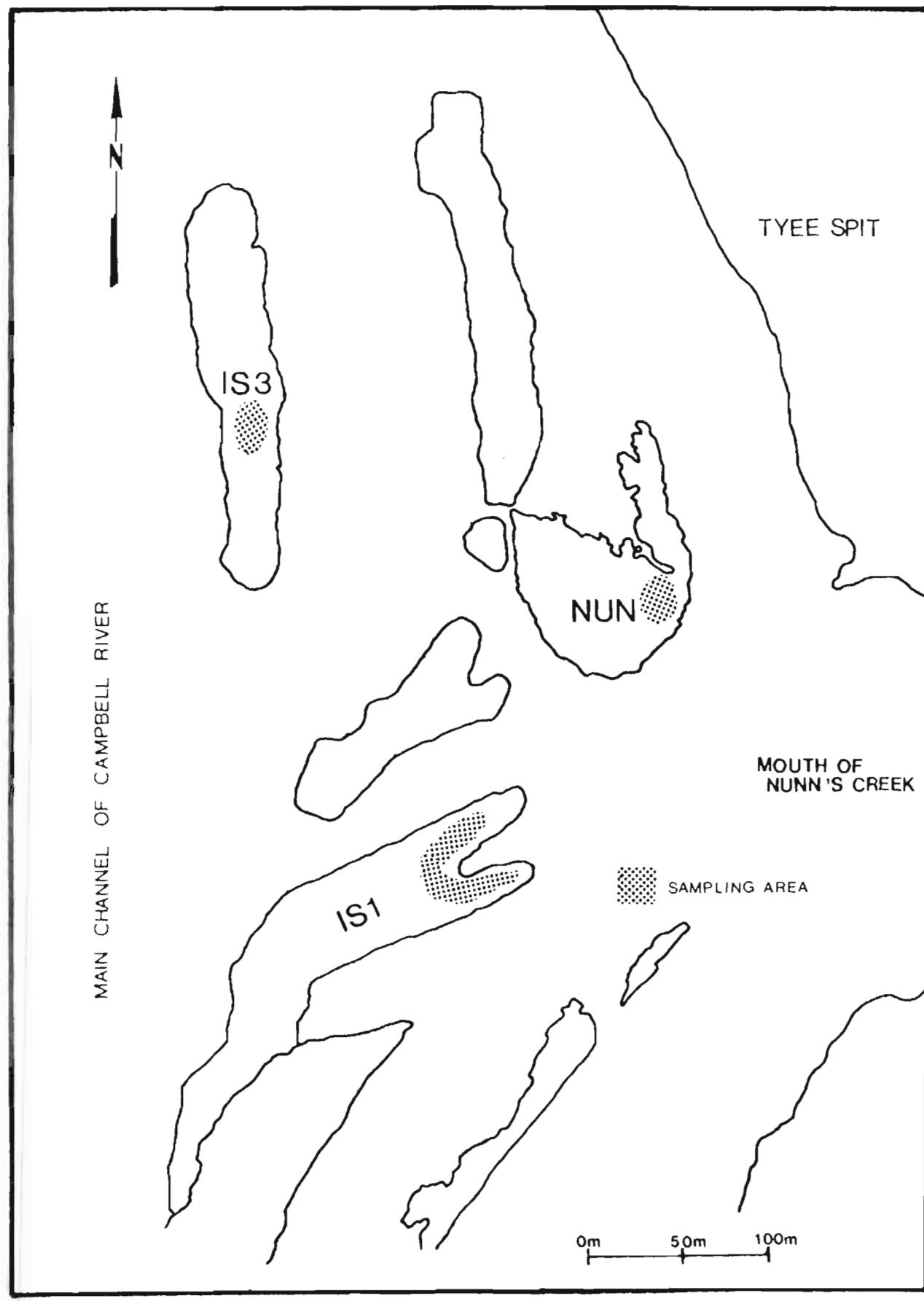


Figure 6. Mitchell Island compensation habitat sampling sites.

Survey Reference: Public Works Canada  
Base Plan 4A-38; Plan File FR86-79

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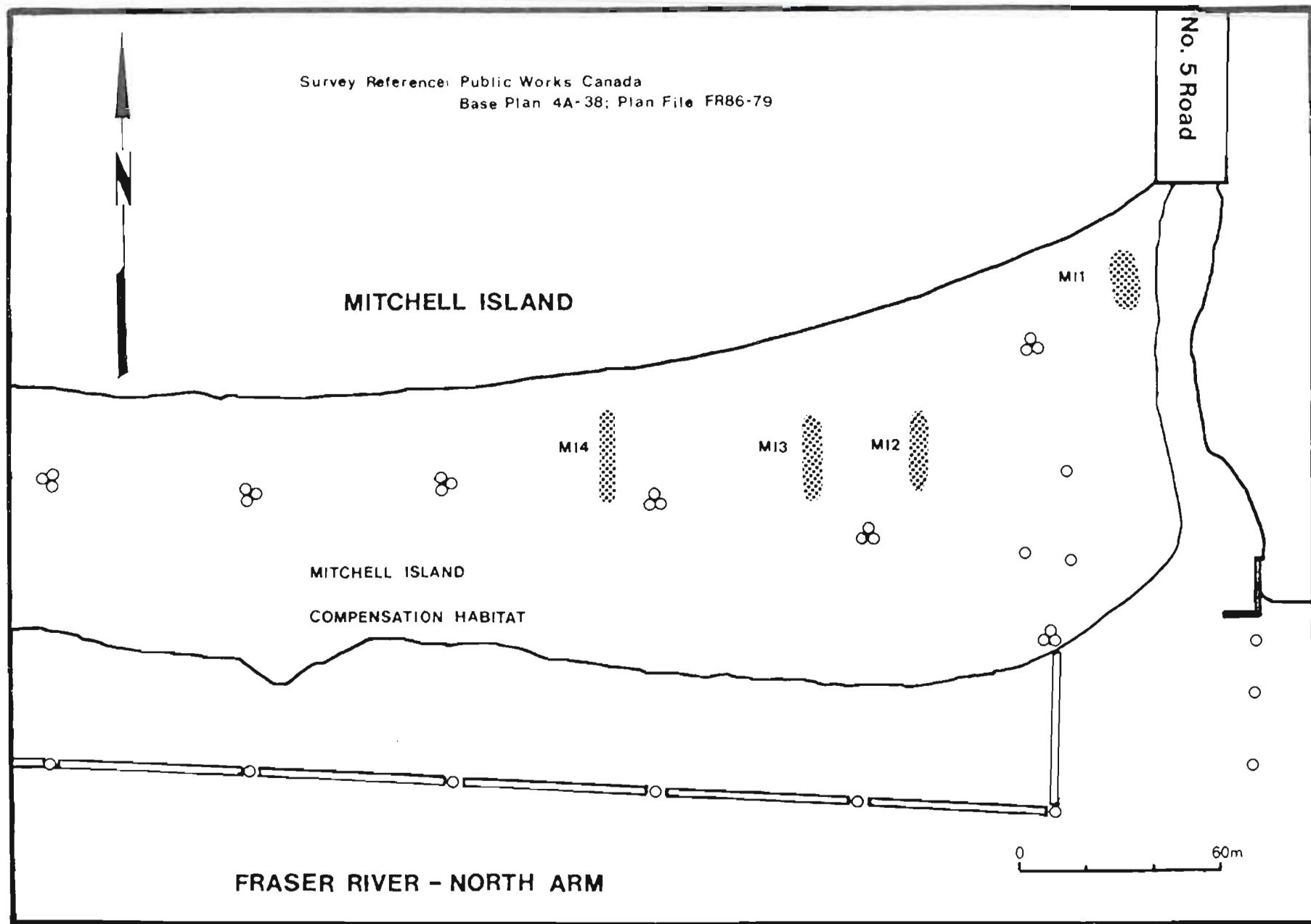
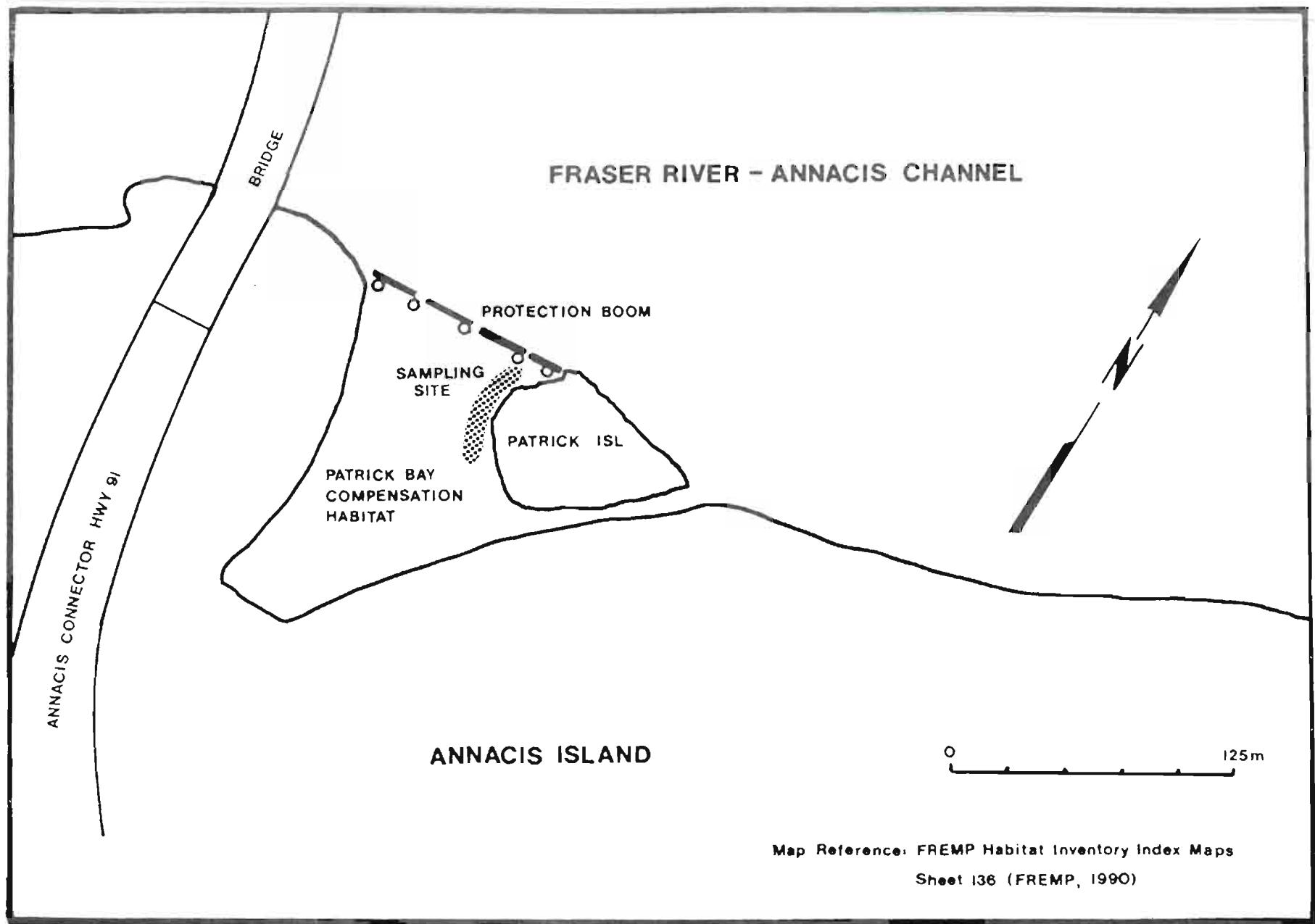


Figure 7. Annacis Channel compensation habitat sampling site.



Map Reference: FREMP Habitat Inventory Index Maps  
Sheet I36 (FREMP, 1990)

