



# West Nile virus

## National Surveillance Report

English Edition  
August 18 to August 24, 2013  
(Report Week 34)

### Canada

#### **Humans:**

During surveillance week 34, the Public Health Agency of Canada (Agency) was informed of five human clinical cases of West Nile virus (WNV). As of week 34, the Agency has been informed of sixteen (16) clinical cases of WNV, fifteen (15) cases reported from Ontario, and one (1) case reported from Manitoba. In Ontario, there have been 5 probable and 10 confirmed cases: Toronto Region (5); South Western Region (5); and, Central West Region (5). In Manitoba, there has been 1 probable case: Winnipeg (1). Of the 16 clinical cases, 2 (12%) were diagnosed as neuroinvasive, 7 (44%) as non-neuroinvasive, and 7 (44%) are currently classified as unspecified WNV illness. One (1) case of a presumptive viremic blood donor was reported in Chaudière-Appalaches, Quebec.

#### **Mosquitoes:**

To date (Week 34), a total of 9201 mosquito pools have been tested for WNV [Ontario (6746); Quebec (1320); British Columbia (220); Saskatchewan (106); and, Manitoba (809)]. Of these, 215 WNV positive mosquito pools have been reported: one hundred and thirty-two (132) in Ontario [Central East Region: Durham (12); Haliburton-Kawartha-Pine Ridge (1); Peel (35); Simcoe-Muskoka District (2); Toronto (10); York (11); Central West Region: Halton (10); Hamilton (6); Haldimand-Norfolk (1); Niagara (3); Waterloo (2); Wellington-Dufferin-Guelph (3); Eastern Region: Eastern Ontario (4); Hastings and Prince Edward (7); Kingston-Frontenac and Lennox & Addington (1); Leeds-Grenville and Lanark (1); Ottawa (11); North East Region: Sudbury (1), South West Region: Chatham-Kent (1); Middlesex-London (1); Perth (2); Wellington-Essex (6); Six Nation Community Region: Six Nations of Grand River (1)]; thirty-six (36) in Quebec [(Blainville (1); Boucherville (1); Brossard (1); Dorval (1); Dollards-des-Ormeaux (1); Montérégie (2); Montreal (18); Laurentides (1); Laval (7); Longueuil (2); and, Pointe-Claire (1)]; one (1) in British Columbia [Okanagan (1)]; seventeen (17) in Manitoba [(Prairie Mountain (2); Winnipeg (4); and, Southern (11)]; and twenty-nine (29) in Saskatchewan [(Mixed-Grass Prairie Region (28); Moist Mixed-Grass Prairie Region (1)].

#### **Dead Birds:**

A total of 373 dead birds have been tested for WNV by the Canadian Cooperative Wildlife Health Centre (CCWHC) and the British Columbia Centre for Disease Control (BCCDC). Of these, 32 positives were reported: 18 in Ontario (South Western Region; Central West Region; Toronto Region; and, Ottawa); six (6) in Quebec [Montreal (2); Sainte-Marguerite-du-lac-Masson (1); Varenne (1); Gatineau (1); and, Estrie Region (1)]; one (1) in Manitoba (Brandon); seven (7) in Saskatchewan (Regina and Saskatoon).

#### **Domestic Animals:**

Seven (7) animals positive for WNV have been reported by the Canadian Food Inspection Agency and the province of Quebec: one (1) heifer cow was reported in Quebec (Montérégie); two (2) in Ontario, an alpaca (Halton Region) and a horse (Windsor-Essex County); two (2) horses in Saskatchewan (Mixed-Grass Prairie Region); one (1) horse in Manitoba (northwest of Winnipeg); and, one (1) horse in Alberta (Lethbridge).

National WNV surveillance data and maps can be found on the PHAC website at: <http://www.phac-aspc.gc.ca/wnv-vwn/index.html>

#### **United States**

As of week 34, 421 human cases of WNV have been reported by the Centers for Disease Control and Prevention (CDC) in the U.S.A. Of these, 197 (47%) were diagnosed as neuroinvasive disease, and 224 (53%) non-neuroinvasive. Thirteen (13) fatal cases were reported. Eighty-two (82) cases of presumptive viremic blood donors were reported.

[http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount12\\_detailed.html](http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount12_detailed.html)

### **Europe and Neighbouring countries**

Since the start of the 2013 WNV season, 218 human cases of WNV have been reported by the European Centre for Disease Prevention and Control (ECDC). Forty-two (42) human cases of WNV have been reported in the European Union and the European Economic Area in Austria (1); Italy (4); Hungary (1); Romania (1); and Greece (35). One hundred and seventy-six (176) human cases of WNV have been reported in neighbouring countries: the Former Yugoslav Republic of Macedonia one (1); Montenegro (1) Serbia (71); the Russian Federation (70); and Israel (33).

[http://ecdc.europa.eu/en/healthtopics/west\\_nile\\_fever/West-Nile-fever-maps/Pages/index.aspx](http://ecdc.europa.eu/en/healthtopics/west_nile_fever/West-Nile-fever-maps/Pages/index.aspx)

Figure 1

WNV clinical cases and asymptomatic infections, by Province / Territory and by report week, 2013 season

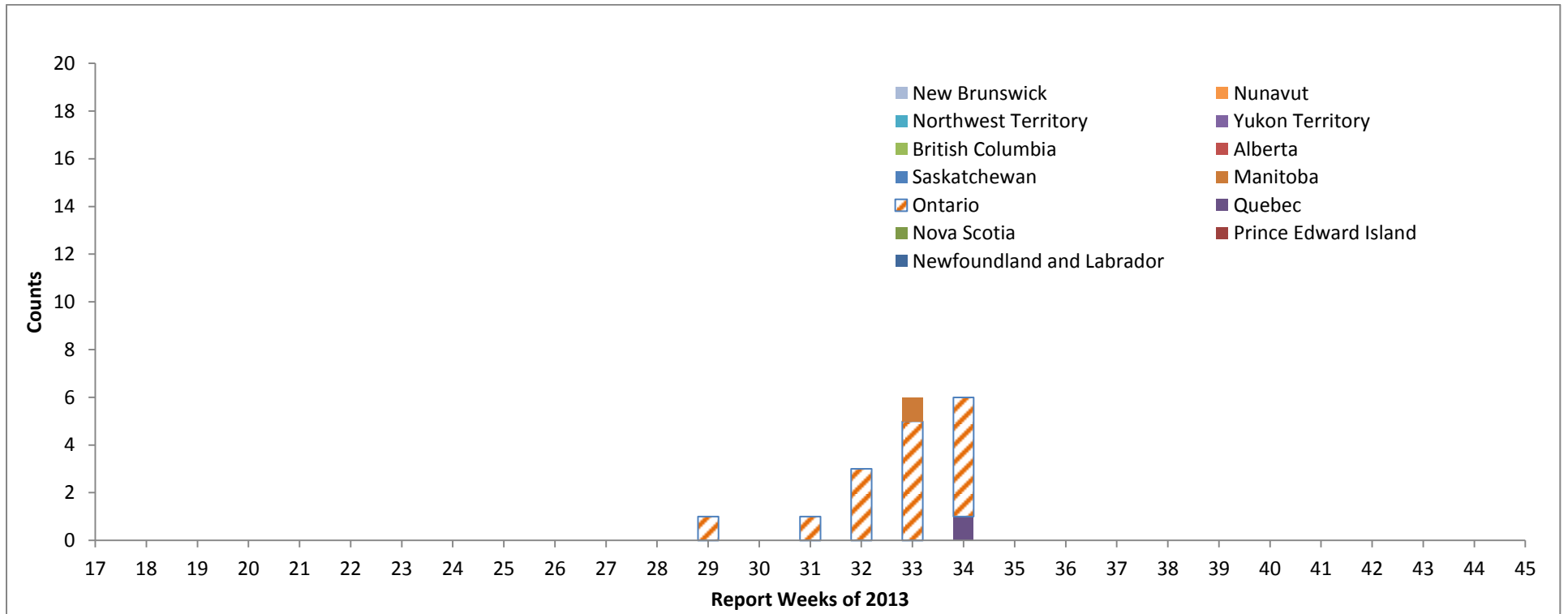




Table 2

West Nile virus human clinical cases and asymptomatic infections by Province / Territory for the current Report Week and year to date, 2013  
Season

		August 11 to August 17, 2013 (Week 33)					
		West Nile virus Neurological syndrome	West Nile virus Non-Neurological syndrome	Unclassified / Unspecified	Total clinical cases <sup>1</sup>	# of travel related cases <sup>2</sup>	West Nile virus asymptomatic infections <sup>3</sup>
		# cases	# cases				
Provinces and territories	Newfoundland and Labrador	0	0	0	0	0	0
	Prince Edward Island	0	0	0	0	0	0
	Nova Scotia	0	0	0	0	0	0
	New Brunswick	0	0	0	0	0	0
	Quebec	0	0	0	0	0	1
	Ontario	1	1	3	5	0	0
	Manitoba	0	0	0	0	0	0
	Saskatchewan	0	0	0	0	0	0
	Alberta	0	0	0	0	0	0
	British Columbia	0	0	0	0	0	0
	Yukon Territory	0	0	0	0	0	0
	Northwest Territory	0	0	0	0	0	0
	Nunavut	0	0	0	0	0	0
	Total	1	1	3	5	0	1
		Year to date: From January 1 to August 17 2013					
Provinces and territories	Newfoundland and Labrador	0	0	0	0	0	0
	Prince Edward Island	0	0	0	0	0	0
	Nova Scotia	0	0	0	0	0	0
	New Brunswick	0	0	0	0	0	0
	Quebec	0	0	0	0	0	1
	Ontario	2	6	7	15	0	0
	Manitoba	0	0	1	1	0	0
	Saskatchewan	0	0	0	0	0	0
	Alberta	0	0	0	0	0	0
	British Columbia	0	0	0	0	0	0
	Yukon Territory	0	0	0	0	0	0
	Northwest Territory	0	0	0	0	0	0
	Nunavut	0	0	0	0	0	0
	Total	2	6	8	16	0	1

<sup>1</sup> Total clinical cases is the sum of both probable and confirmed: West Nile virus neurological and non-neurological syndromes, along with any unclassified or unspecified cases.

<sup>2</sup> Likely related to travel outside the province/territory. These cases are included in either the total clinical cases or West Nile virus asymptomatic infections.

<sup>3</sup> Satisfies West Nile virus diagnostic test criteria in the absence of clinical criteria. This category could include asymptomatic blood donors whose blood is screened using a nucleic acid amplification test (NAT), by blood operators (i.e. Canadian Blood Services or Hema-Quebec) and is subsequently brought to the attention of public health officials. Blood operators in Canada perform a supplementary West Nile virus specific NAT following any positive donor screen test result.



[Link Figure 2 to the following table 3 below](#)

Table 3

		Report Weeks of 2013																												
		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
	2013	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	6	6												
	2012	0	0	0	0	0	0	0	0	0	0	3	5	11	16	27	53	63	57	43	43	45	24	30	14	9	5	1	0	0
	2011	0	0	0	0	1	0	1	0	2	0	0	0	0	0	1	8	3	8	16	11	5	13	6	3	3	2	0	0	0
	2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0
	2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	2	1	1	0	0	2	0	0	1	0	0
	2008	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	5	6	2	11	8	1	1	0	1	0	0	0
	2007	0	0	0	0	0	0	2	2	3	4	11	35	36	72	139	424	471	443	287	182	116	71	30	18	10	11	5	4	2
	2006	0	0	0	0	0	0	0	0	0	0	2	1	1	4	10	11	15	27	22	16	13	1	2	2	0	0	0	0	0
	2005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	11	28	28	38	45	27	15	7	12	3	3	1	0
	2004	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	6	4	2	3	2	1	1	1	0	0	1	0	0	0
	2003	0	0	0	0	0	0	0	0	0	1	1	1	5	11	9	27	66	249	323	324	178	107	82	37	14	8	4	3	0

Table 4

Reported cumulative number of West Nile virus positive mosquito pools by Province/Territory and by report week, 2013 season\*

		Report Weeks of 2013																												
		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
	Newfoundland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
	Prince Edward Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
	New Brunswick	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
	Nova Scotia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
	Quebec	0	0	0	0	0	0	0	0	0	0	0	2	3	5	11	23	36												
	Ontario	0	0	0	0	0	0	0	0	2	2	4	12	22	41	65	89	131												
	Manitoba	0	0	0	0	0	0	0	0	0	0	1	1	7	10	16	16	16												
	Saskatchewan	0	0	0	0	0	0	0	0	0	0	1	1	3	3	18	29	29												
	Alberta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
	British Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1												
	Yukon Territory	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
	Northwest Territory	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
	Nunavut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												

\* Detailed West Nile virus mosquito surveillance data can be accessed through Provincial/ Territorial websites



Figure 3

Reported number of dead birds testing positive for WNV by Province / Territory and by report week, 2013 season

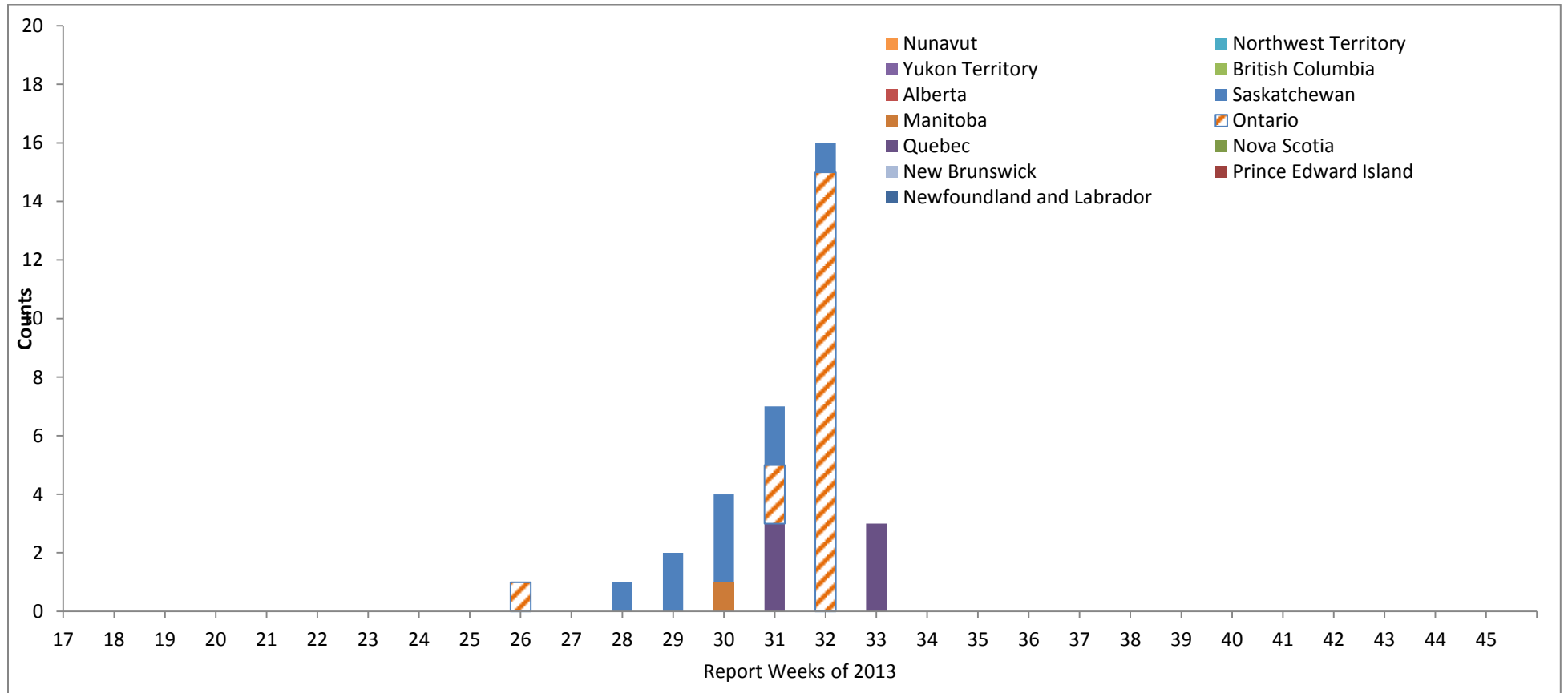
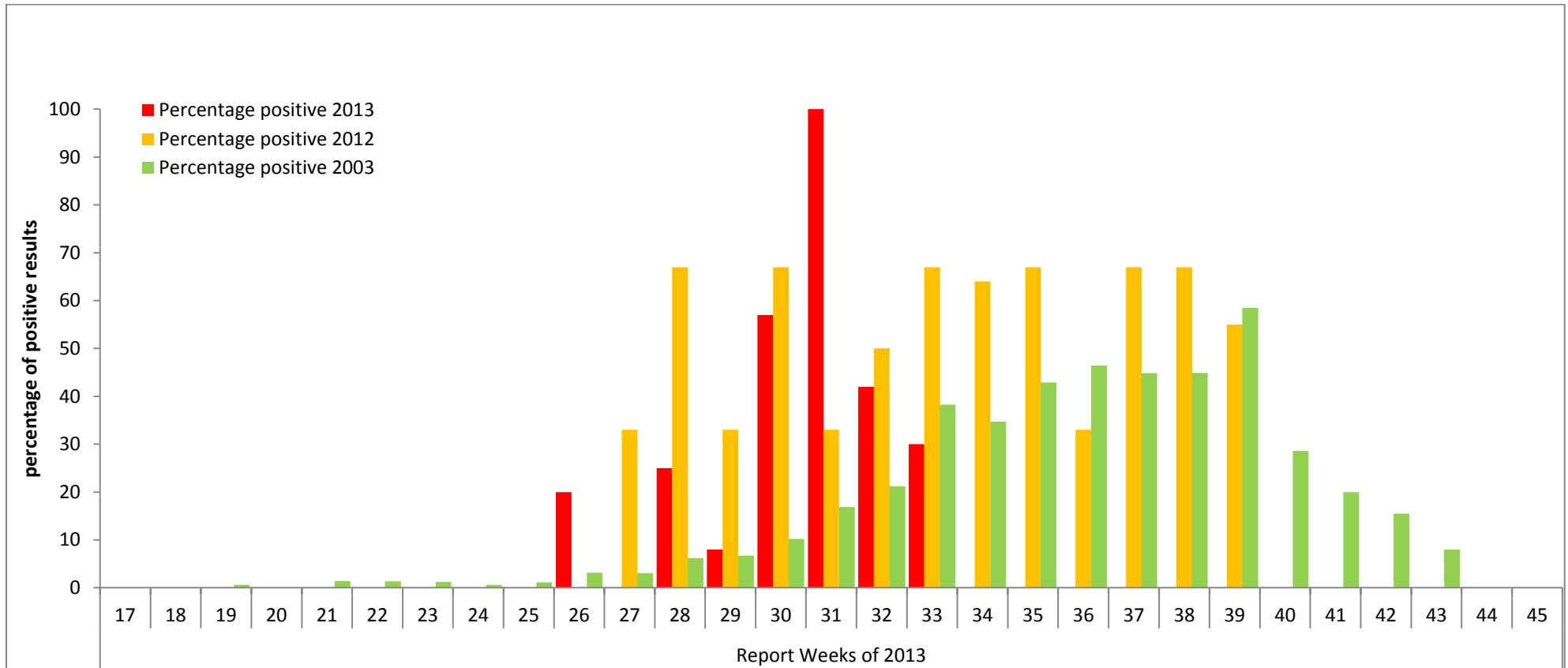




Figure 4

Percentage of dead birds testing positive for WNV in the 2013 season by report week, as compared to the 2003 and 2012 seasons



Link figure 4 to the following table 7 below

Table 7

		Report Weeks of 2013																												
		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Numbers positive	2013	0	0	0	0	0	0	0	0	0	1	0	1	2	4	7	16	3	0											
Numbers tested	2013	0	0	0	0	0	0	0	0	0	5	0	4	25	7	7	38	10	0											
Percentage positive	2013	0	0	0	0	0	0	0	0	0	20	0	25	8	57	100	42	30	0											
Percentage positive	2012	0	0	0	0	0	0	0	0	0	33	67	33	67	33	50	67	64	67	33	67	67	55	0	0	0	0	0	0	0
Percentage positive	2003	0	0	1	0	1	1	1	1	1	3	3	6	7	10	17	21	38	35	43	46	45	45	58	29	20	15	8	0	0