

**Results of avian influenza surveillance in Alaska between May 2006 and March 2007.<sup>1</sup>**

The total number of samples collected, the number tested by matrix rRT-PCR and virus isolation in embryonated eggs, and the number of samples positive for avian influenza by both methods is presented for each of 126 species. The rRT-PCR results were used in the statistical analyses and summaries in the text.

Family/Tribe	Common Name	Scientific Name	Number Sampled	Number RT-PCR Positive	Number for Virus Isolation	Number Virus Isolation Positive	RT-PCR Positive (%)	Virus Isolation Positive (%)
<i>Anatidae/Anserini</i>	Geese		5,194	87	4,364	32	1.67	0.73
	Greater white-fronted goose	<i>Anser albifrons</i>	1,081	40	847	12	3.70	1.42
	<b>Emperor goose<sup>2</sup></b>	<i>Chen canagica</i>	685	11	669	8	1.61	1.20
	<b>Lesser snow goose</b>	<i>C. caerulescens</i>	720	17	646	4	2.36	0.62
	<b>Black brant</b>	<i>Branta bernicla</i>	2,075	8	1,596	3	0.38	0.19
	Cackling goose	<i>B. hutchinsii</i>	373	2	357	1	0.53	0.28
	Canada goose	<i>B. canadensis</i>	260	9	249	4	3.46	1.61
<i>Anatidae/Cygnini</i>	Swans		593	7	537	7	1.18	1.30
	Trumpeter swan	<i>Cygnus buccinator</i>	10	0	4	0	0.00	0.00
	<b>Tundra swan</b>	<i>C. columbianus</i>	583	7	533	7	1.20	1.31

<i>Anatidae/Anatini</i>	Surface-feeding Ducks		2,342	164	1,309	107	6.99	8.17
	Gadwall	<i>Anas strepera</i>	16	0	0	0	0.00	-
	Eurasian wigeon	<i>A. penelope</i>	1	0	1	0	0.00	0.00
	American wigeon	<i>A. americana</i>	64	0	26	0	0.00	0
	Mallard	<i>A. platyrhynchos</i>	273	25	157	25	9.16	15.92
	Blue-winged teal	<i>A. discors</i>	1	0	0	0	0.00	-
	Northern shoveler	<i>A. clypeata</i>	22	1	19	1	4.55	5.26
	<b>Northern pintail</b>	<i>A. acuta</i>	1,426	87	793	57	6.10	7.19
	Green-winged teal	<i>A. crecca</i>	539	51	313	24	9.43	7.67
<i>Anatidae/Aythiini</i>	Bay Ducks		29	0	24	0	0.00	0.00
	Canvasback	<i>Aythya valisineria</i>	8	0	4	0	0.00	0.00
	Redhead	<i>A. americana</i>	1	0	0	0	0.00	-
	Greater scaup	<i>A. marila</i>	1	0	1	0	0.00	0.00
	Lesser scaup	<i>A. affinis</i>	19	0	19	0	0.00	0.00
<i>Anatidae/Mergini</i>	Sea Ducks		2,332	16	1,716	18	0.69	1.05
	<b>Steller's eider</b>	<i>Polysticta stelleri</i>	737	6	300	3	0.81	1.00
	<b>Spectacled eider</b>	<i>Somateria fischeri</i>	348	2	293	1	0.57	0.34
	<b>King eider</b>	<i>S. spectabilis</i>	680	6	640	9	0.88	1.41
	<b>Common eider</b>	<i>S. mollissima</i>	395	1	383	4	0.25	1.04

	Harlequin duck	<i>Histrionicus histrionicus</i>	65	0	0	0	0.00	-
	Surf scoter	<i>Melanitta perspicillata</i>	2	0	2	0	0.00	0.00
	White-winged scoter	<i>M. fusca</i>	41	0	41	0	0.00	0.00
	Black scoter	<i>M. nigra</i>	10	0	10	0	0.00	0.00
	<b>Long-tailed duck</b>	<i>Clangula hyemalis</i>	52	1	46	1	1.92	2.17
	Bufflehead	<i>Bucephala albeola</i>	1	0	1	0	0.00	0.00
	Common merganser	<i>Mergus merganser</i>	1	0	1	0	0.00	0.00
<i>Gaviidae</i>	Loons		9	0	5	0	0.00	0.00
	Red-throated loon	<i>Gavia stellata</i>	3	0	0	0	0.00	-
	Arctic loon	<i>G. arctica</i>	1	0	1	0	0.00	0.00
	Pacific loon	<i>G. pacifica</i>	2	0	2	0	0.00	0.00
	Common loon	<i>G. immer</i>	1	0	1	0	0.00	0.00
	Yellow-billed loon	<i>G. adamsii</i>	2	0	1	0	0.00	0.00
<i>Podicipedidae</i>	Grebes		1	0	1	0	0.00	0.00
	Red-necked grebe	<i>Podiceps grisegena</i>	1	0	1	0	0.00	0.00
<i>Procellariidae</i>	Shearwaters, Petrels		1	0	1	0	0.00	0.00
	Northern fulmar	<i>Fulmarus glacialis</i>	1	0	1	0	0.00	0.00
<i>Phalacrocoracidae</i>	Cormorants		5	0	5	0	0.00	0.00
	Pelagic cormorant	<i>Phalacrocorax pelagicus</i>	3	0	3	0	0.00	0.00

	Red-faced cormorant	<i>P. urile</i>	2	0	2	0	0.00	0.00
<i>Gruidae</i>	Cranes		161	0	131	0	0.00	0.00
	<b>Sandhill crane</b>	<i>Grus canadensis</i>	161	0	131	0	0.00	0.00
<i>Charadriidae</i>	Lapwings, Plovers		140	0	122	0	0.00	0.00
	Black-bellied plover	<i>Pluvialis squatarola</i>	73	0	63	0	0.00	0.00
	American golden plover	<i>P. dominica</i>	15	0	14	0	0.00	0.00
	<b>Pacific golden plover</b>	<i>P. fulva</i>	42	0	35	0	0.00	0.00
	Golden plover spp.	<i>P. spp.</i>	6	0	6	0	0.00	0.00
	Semipalmated plover	<i>Charadrius semipalmatus</i>	4	0	4	0	0.00	0.00
<i>Scolopacidae</i>	Sandpipers, Phalaropes		3,040	5	2,402	1	0.16	0.04
	Greater yellowlegs	<i>T. melanoleuca</i>	1	0	1	0	0.00	0.00
	Whimbrel	<i>Neumenius phaeopus</i>	1	0	1	0	0.00	0.00
	Bristle-thighed curlew	<i>N. tahitiensis</i>	9	0	9	0	0.00	0.00
	<b>Bar-tailed godwit</b>	<i>Limosa lapponica</i>	210	3	167	0	1.43	0.00
	<b>Ruddy turnstone</b>	<i>Arenaria interpres</i>	30	0	27	0	0.00	0.00
	Black turnstone	<i>A. melanocephala</i>	2	0	2	0	0.00	0.00
	<b>Red knot</b>	<i>Calidris canutus</i>	79	0	71	0	0.00	0.00
	Semipalmated sandpiper	<i>C. pusilla</i>	212	0	108	0	0.00	0.00
	Western sandpiper	<i>C. mauri</i>	128	0	52	0	0.00	0.00

Baird's sandpiper	<i>C. bairdii</i>	1	0	1	0	0.00	0.00
<b>Pectoral sandpiper</b>	<i>C. melanotos</i>	580	0	549	1	0.00	0.18
<b>Sharp-tailed sandpiper</b>	<i>C. acuminata</i>	225	0	192	0	0.00	0.00
<b>Rock sandpiper</b>	<i>C. ptilocnemis</i>	173	0	156	0	0.00	0.00
<b>Dunlin</b>	<i>C. alpina</i>	897	2	682	0	0.22	0.00
Stilt sandpiper	<i>C. himantopus</i>	3	0	3	0	0.00	0.00
<b>Buff-breasted sandpiper</b>	<i>Tryngites subruficollis</i>	92	0	81	0	0.00	0.00
Ruff	<i>Philomachus pugnax</i>	6	0	6	0	0.00	0.00
<b>Long-billed dowitcher</b>	<i>Limnodromus scolopaceus</i>	165	0	157	0	0.00	0.00
Wilson's snipe	<i>Gallinago delicata</i>	9	0	5	0	0.00	0.00
Red-necked phalarope	<i>Phalaropus lobatus</i>	38	0	18	0	0.00	0.00
Red phalarope	<i>P. fulicarius</i>	179	0	114	0	0.00	0.00
<i>Laridae</i>							
Gulls, Terns		453	6	358	7	1.32	1.96
Mew gull	<i>Larus canus</i>	5	0	5	0	0.00	0.00
Herring gull	<i>L. argentatus</i>	4	0	3	0	0.00	0.00
<b>Glaucous gull</b>	<i>L. hyperboreus</i>	138	5	45	4	3.60	8.89
Sabine's gull	<i>Xema sabini</i>	1	0	0	0	0.00	-
Black-legged kittiwake	<i>Risa tridactyla</i>	2	0	2	0	0.00	0.00
<b>Aleutian tern</b>	<i>Onychoprion aleuticus</i>	302	1	302	3	0.33	0.99

	Arctic tern	<i>Sterna paradisaea</i>	1	0	1	0	0.00	0.00
<i>Stercorariidae</i>	Jaegers		6	0	5	0	0.00	0.00
	Pomarine jaeger	<i>Stercorarius pomarinus</i>	4	0	3	0	0.00	0.00
	Long-tailed jaeger	<i>S. longicaudus</i>	2	0	2	0	0.00	0.00
<i>Alcidae</i>	Auks, Murres, Puffins		562	8	562	16	1.42	2.85
	Common murre	<i>Uria aalge</i>	76	1	76	2	1.32	2.63
	Thick-billed murre	<i>U. lomvia</i>	235	7	235	10	2.98	4.26
	Parakeet auklet	<i>Aethia psittacula</i>	8	0	8	0	0.00	0.00
	Least auklet	<i>A. pusilla</i>	30	0	30	0	0.00	0.00
	Crested auklet	<i>A. cristatella</i>	207	0	207	4	0.00	1.93
	Horned puffin	<i>Fratercula corniculata</i>	2	0	2	0	0.00	0.00
	Tufted puffin	<i>F. cirrhata</i>	4	0	4	0	0.00	0.00
<i>Strigidae</i>	Owls		1	0	0	0	0.00	-
	Short-eared owl	<i>Asio flammeus</i>	1	0	0	0	0.00	-
<i>Picidae</i>	Woodpeckers		1	0	0	0	0.00	-
	Northern flicker	<i>Colaptes auratus</i>	1	0	0	0	0.00	-
<i>Tyrannidae</i>	Tyrant Flycatchers		5	0	0	0	0.00	-
	Alder flycatcher	<i>Empidonax alnorum</i>	5	0	0	0	0.00	-
<i>Laniidae</i>	Shrikes		2	0	1	0	0.00	0.00

	Northern shrike	<i>Lanius excubitor</i>	2	0	1	0	0.00	0.00
<i>Corvidae</i>	Crows, Jays		5	0	3	0	0.00	0.00
	Gray jay	<i>Perisoreus canadensis</i>	2	0	0	0	0.00	-
	Common raven	<i>Corvus corax</i>	3	0	3	0	0.00	0.00
<i>Alaudidae</i>	Larks		1	0	1	0	0.00	0.00
	Horned lark	<i>Eremophila alpestris</i>	1	0	1	0	0.00	0.00
<i>Hirundinidae</i>	Swallows		2	0	0	0	0.00	-
	Tree swallow	<i>Tachycineta bicolor</i>	1	0	0	0	0.00	-
	Cliff swallow	<i>Petrochelidon pyrrhonota</i>	1	0	0	0	0.00	-
<i>Paridae</i>	Chickadees		1	0	0	0	0.00	-
	Black-capped chickadee	<i>Poecile atricapillus</i>	1	0	0	0	0.00	-
<i>Certhiidae</i>	Creepers		1	0	0	0	0.00	-
	Brown creeper	<i>Certhia americana</i>	1	0	0	0	0.00	-
<i>Regulidae</i>	Kinglets		2	0	0	0	0.00	-
	Ruby-crowned kinglet	<i>Regulus calendula</i>	2	0	0	0	0.00	-
<i>Sylviidae</i>	Old World Warblers		769	0	409	0	0.00	0.00
	<b>Arctic warbler</b>	<i>Phylloscopus borealis</i>	769	0	409	0	0.00	0.00
<i>Turdidae</i>	Thrushes		302	0	137	0	0.00	0.00
	Bluethroat	<i>Luscinia svecica</i>	12	0	6	0	0.00	0.00

	Northern wheatear	<i>Oenanthe oenanthe</i>	10	0	1	0	0.00	0.00
	<b>Gray-cheeked thrush</b>	<i>Catharus minimus</i>	229	0	124	0	0.00	0.00
	Swainson's thrush	<i>C. ustulatus</i>	20	0	0	0	0.00	-
	Hermit thrush	<i>C. guttatus</i>	10	0	1	0	0.00	0.00
	American robin	<i>Turdus migratorius</i>	11	0	5	0	0.00	0.00
	Varied thrush	<i>Ixoreus naevius</i>	10	0	0	0	0.00	-
<i>Motacillidae</i>	Wagtails, Pipits		306	0	217	0	0.00	0.00
	<b>Eastern yellow wagtail</b>	<i>Motacilla tschutschensis</i>	304	0	216	0	0.00	0.00
	American pipit	<i>Anthus rubescens</i>	2	0	1	0	0.00	0.00
<i>Parulidae</i>	Wood warblers		135	0	27	0	0.00	0.00
	Orange-crowned warbler	<i>Vermivora celata</i>	44	0	2	0	0.00	0.00
	Yellow warbler	<i>Dendroica petechia</i>	7	0	7	0	0.00	0.00
	Yellow-rumped warbler	<i>D. coronata</i>	11	0	0	0	0.00	-
	Bay-breasted warbler	<i>D. castanea</i>	1	0	0	0	0.00	-
	Blackpoll warbler	<i>D. striata</i>	3	0	1	0	0.00	0.00
	Northern waterthrush	<i>Seiurus noveboracensis</i>	27	0	13	0	0.00	0.00
	Wilson's warbler	<i>Wilsonia pusilla</i>	42	0	4	0	0.00	0.00
<i>Emberizidae</i>	Emberizids		329	0	90	1	0.00	1.11
	American tree sparrow	<i>Spizella arborea</i>	96	0	29	0	0.00	0.00

	Savannah sparrow	<i>Passerculus sandwichensis</i>	92	0	30	0	0.00	0.00
	Fox sparrow	<i>Passerella iliaca</i>	26	0	15	0	0.00	0.00
	Lincoln's sparrow	<i>Melospiza lincolnii</i>	20	0	0	0	0.00	-
	White-crowned sparrow	<i>Zonotrichia leucophrys</i>	49	0	5	0	0.00	0.00
	Golden-crowned sparrow	<i>Z. atricapilla</i>	20	0	3	0	0.00	0.00
	Dark-eyed junco	<i>Junco hyemalis</i>	16	0	0	0	0.00	-
	Lapland longspur	<i>Calcarius lapponicus</i>	8	0	6	0	0.00	0.00
	Snow bunting	<i>Plectrophenax nivalis</i>	2	0	2	1	0.00	50.00
<i>Fringillidae</i>	Finches		67	0	15	0	0.00	0.00
	Brambling	<i>Fringilla montifringilla</i>	1	0	1	0	0.00	0.00
	Pine grosbeak	<i>Pinicola enucleator</i>	3	0	0	0	0.00	-
	White-winged crossbill	<i>Loxia leucoptera</i>	1	0	0	0	0.00	-
	Common redpoll	<i>Carduelis flammea</i>	52	0	9	0	0.00	0.00
	Hoary redpoll	<i>C. hornemanni</i>	10	0	5	0	0.00	0.00
TOTALS			16,797	293	12,442	189	1.74	1.52

<sup>1</sup>Additional details regarding age, sex, and geographic composition of samples can be found in USFWS/USGS: Sampling for highly pathogenic Asian H5N1 avian influenza in migratory birds in Alaska: results of 2006 field season. Progress Report, U. S. Fish and Wildlife Service (Region 7, Alaska) and U. S. Geological Survey, Alaska Science Center, Anchorage Alaska. [[http://Alaska.usgs.gov/science/biology/avian\\_influenza/pdfs/USFWS-USGS\\_2006\\_AK\\_HPAI\\_H5N1\\_Sampling\\_Accom\\_Rep.pdf](http://Alaska.usgs.gov/science/biology/avian_influenza/pdfs/USFWS-USGS_2006_AK_HPAI_H5N1_Sampling_Accom_Rep.pdf)].

<sup>2</sup>Common names of birds in bold font were priority species for sampling.