

QUARTERLY DIE-OFF REPORT
 October 1987 - December 1987
 National Wildlife Health Research Center

Location	State	Date	Species	Mortality	Causes
Greenup Co.	KY	07/10/87-07/10/87	Robin, American Grackle Blackbird Duck, Muscovy	250(e)	Toxin suspect ^{1/}
Spring Lake WPA	SD	08/01/87-09/10/87	Coot, American Duck, American Wigeon Duck, Gadwall Duck, Mallard	260(e)	Botulism suspect ^{1/}
Arapaho NWR	CO	08/25/87-08/30/87	Duck, Ruddy Coot, American	11	Botulism suspect ^{1/}
Medicine Lake NWR	MT	08/30/87-10/01/87	Deer, White-tailed	81(e)	Epizootic Hemorrhagic Disease suspected ^{1/}
Sacramento NWR	CA	09/01/87-11/20/87	Duck, Northern Shoveler Duck, American Wigeon Duck, Northern Pintail Duck, Green-winged Teal	5146	Botulism type C
Sutter NWR	CA	09/16/87-11/09/87	Duck, Northern Pintail Duck, American Wigeon Duck, Mallard Coot, American	3387	Botulism type C
Crescent Lake NWR	NE	09/27/87-11/23/87	Duck, Green-winged Teal Coot, American Duck, Mallard Duck, Shoveler	732	Botulism type C
Monterey	CA	10/03/87-ongoing	Pelican, Brown	200(e)	Erysipelas Salmonella typhimurium
Poynette	WI	10/06/87-10/07/87	Swallow, Tree	20(e)	Open

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Portsmouth	VA	10/07/87-11/22/87	Duck, Northern Shoveler Duck, American Wigeon Duck, Ruddy Duck, Black	323	Botulism type C
Rice Lake WMA	IA	10/18/87-12/31/87	Goose, Canada Duck, Mallard	251	Lead Poisoning
Layfayette	LA	10/25/87-10/30/87	Duck, Gadwall Duck, Green-winged teal Duck, Mallard Duck, Northern Pintail	500(e)	Botulism type C
Buffalo Lake NWR	TX	10/27/87-11/04/87	Duck, Gadwall Duck, Northern Pintail Duck, Green-winged Teal Duck, American Wigeon	1069(e)	Undetermined Botulism suspect
Hobe Sound NWR	FL	10/03/87-01/10/88	Gannet, Northern Loon, Common Cormorant, Double-breasted Tern, Royal	125(e)	Diphtheroid toxemia suspected
Tule Lake NWR	CA	11/05/87-ongoing	Goose, White-fronted Goose, Snow Goose, Cackling Canada Goose, Ross'	660	Avian cholera
Deming	NM	11/14/87-11/17/87	Duck, Mallard Duck, Northern Pintail Duck, Gadwall	20(e)	Botulism suspect
Southern Massachusetts	MA	11/15/87-11/25/87	Goose, Canada	200(e)	Lead Poisoning suspect ^{1/}
Lower Klamath NWR	CA	11/27/87-ongoing	Duck, Mallard Duck, Northern Pintail Duck, American Wigeon	1000(e)	Avian cholera
Monte Vista NWR	CO	11/30/87-ongoing	Duck, Mallard Duck, Northern Pintail	1800(e)	Avian cholera

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Saint George	UT	12/01/87-12/30/87	Starling, European Harrier, Northern Blackbird, Brewer's Meadowlark	180(e)	Toxin: OP suspect
Butte Sink NWR	CA	12/01/87-ongoing	Coot, American Duck, Canvasback Duck, Mallard Duck, Northern Pintail	1200	Avian cholera
Clay Center	NE	12/03/87-12/23/87	Goose, Snow Goose, Canada Duck, Mallard Goose, White-fronted	158	Avian cholera
Riverton WMA	IA	12/08/87-01/05/88	Goose, Snow	700(e)	Avian cholera
Merced NWR	CA	12/15/87-ongoing	Goose, Snow Goose, Ross' Goose, White-fronted	100	Avian cholera
Monongahela River	PA & WV	12/20/87-ongoing	Waterfowl	1500(e)	Toxin: oil ¹ / ₁
Chehalis	WA	12/23/87-12/30/87	Duck, American Wigeon Duck, Northern Pintail	61	Aspergillosis
Humboldt NWR	CA	12/24/87-12/31/87	Coot, American Swan, Tundra	56	Avian cholera
<u>Update*</u>					
Western Oregon NWR	OR	07/15/87-11/30/87	Murre, Common	1988	Emaciation
Newport	OR	07/30/87-11/30/87	Auklet, Rhinoceros	234	Emaciation

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(e) = estimated mortality

* = final mortality information from cases ongoing last quarter

1/ = no specimens submitted to NWHRC

For specific information, contact the following Resource Health Team members:

Pacific Flyway - Kathryn Converse, Central Flyway - Ronald Windingstad, Mississippi Flyway - Karen Roertgen

Atlantic Flyway - Thomas Roffe.

National Wildlife Health Research Center Quarterly Mortality Report.

The following summarizes bird mortalities reported by NWHRC for October-December 1987.

NWHRC received reports of 27 wildlife disease die-offs. The primary causes of mortality were avian botulism type C (33%) and avian cholera (30%).

During the summer of 1987 an estimated 143 waterfowl, kingfishers, and herons died on two lakes in Denver, Colorado; one lake within the Denver Zoo. Avian botulism type C toxin was recovered from waterfowl and the two kingfishers picked up in the zoo; no cause of mortality was established for the 58 black-crowned night herons. Diligent carcass pickup and vegetation removal by zoo personnel prevented spread of avian botulism to their other avian species.

Losses of waterfowl (mostly mallards) continue at Monte Vista NWR in Colorado making this avian cholera die-off the largest there since the 1970's. Mortality of 150 waterfowl (mostly snow geese) at Clay Center, Nebraska, represents the third fall outbreak of avian cholera in the past 4 years in the eastern portion of Nebraska's Rainwater Basin. Unusually high losses of white-fronted, cackling, and great basin Canada geese to avian cholera are occurring at Lower Klamath and Tule Lake NWR's in California.

An estimated 182 young-of-the-year gannets and several loons died and washed up on a beach on Jupiter Island near Hobe Sound NWR in Florida during December and early January. Other fish-eating birds such as pelicans and cormorants were not affected (although one cormorant was found dead at the same time). Postmortem examination eliminated infectious and traumatic causes of death. Further diagnostic efforts on gannets revealed a significant

diphtheroid esophagitis with some dissemination. Presumed cause of mortality was attributed to diphtheroid toxemia.

Brown pelicans continue to die along the coast of California between San Luis Obispo and Moss Landing. Erysipelothrix rhusiopathiae was isolated from 13 pelicans picked up in San Luis Obispo and Monterey and Salmonella typhimurium was isolated from three pelicans at Monterey. Mortalities seem to be associated with pelicans eating fish offal from fishing boats and at fish processing plants. Fish are the suspected source of exposure to Erysipelothrix; no mammalian sources are known along the coast and brown pelicans do not travel inland. Environmental samples, cultures, and clinical pathology on live-trapped pelicans, and histopathology are pending.

An oil spill into the Monongahela and Ohio Rivers in Pennsylvania and West Virginia during December killed an estimated 1,500 birds of various species.

3/14/88