

QUARTERLY DIE-OFF REPORT
 July 1986 - September 1986
 National Wildlife Health Center

Location	Date	Principal species	Mortality	Principal cause of mortality
Burke, VA	6/86 - 7/20/86	Muskovies, pekings	40-50	DVE
Culpepper, VA	6/12/86 - 6/13/86	Mallards	45	Avian botulism
Richfield, MN	7/09/86 - 7/29/86	Mallards	75	Avian botulism
Bridgeport, WA	6/03/86 - 6/06/86	Mallards, Canada geese	10	Undetermined
Lower Klamath NWR, CA	6/12/86 - 9/04/86	Mallards, pintails, grebes, gulls	3,065	Avian botulism
Caballo Lake, NM	7/14/86 - 7/14/86	Snowy egrets	100	Emaciation
Reno, NV	7/07/86 - 7/25/86	Mallards	135	Avian botulism, toxin suspect
Freeport, TX	7/20/86 - 7/20/86	Black skimmers	301	Exposure, dehydration
Lexington, KY	7/07/86 - 7/25/86	Mallards Domestic mallards	151	Avian botulism
Horicon NWR, WI	6/25/86 - 10/1/86	Ducks, gulls, yellowlegs	30	Avian botulism
Medicine Lake NWR, MT	7/20/86 - 9/15/86	Waterfowl, shorebirds	7,000	Avian botulism
Arlington Heights, IL	7/01/86 - 8/01/86	Mallards	50	Avian botulism suspect ✓
Long Lake NWR, ND	7/22/86 - 9/07/86	Ducks, shorebirds	9,300	Avian botulism
Dayton, OH	7/14/86 - 7/16/86	Mallards, shorebirds	17	Avian botulism

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Elizabeth River, VA	7/21/86 - 7/28/86	Mallards	6	Avian botulism
St. Paul Island, AK	7/31/86 - 8/18/86	Murres, shearwaters, kittiwakes	18	Emaciation, starvation
Lake Winnebago, WI	8/12/86 - 8/28/86	Mallards	12	Avian botulism
New Town, ND	7/05/86 - 8/15/86	Ring billed gulls Franklin's gulls California gulls	500	Chlamydiosis
Humboldt WMA, NV	8/01/86 - 8/08/86	Gulls, mallards Pintails, teals	50	Avian botulism, undetermined
Mud Lake, ID	8/02/86 - 8/11/86	Sage grouse	50	Organophosphate
Market Lake WMA, ID	8/06/86 - 8/25/86	Ducks, American coots, grebes, other	671	Avian botulism, lead poisoning
Denver Zoo, CO	6/86 - 9/86	Mallards, wood ducks, Canada geese	500	Avian botulism and Baygon toxicity
J. Clark Salyer NWR, ND	8/08/86 - 8/24/86	Ducks, coots, shorebirds	16,500(e)	Avian botulism
Cleveland, OH	8/06/86 - 10/16/86	Shorebirds, sandpipers, lesser yellowlegs	1,000	Avian botulism
Waubay NWR, SD	7/25/86 - 9/11/86	Ducks, coots	4,344(e)	Avian botulism
American Falls Reservoir, ID	8/19/86 - 8/27/86	Canada geese	10	Necrotic esophagitis
Delevan NWR, CA	9/22/86 - ongoing	Mallards, pintails, coots	694	Avian botulism
Sacramento NWR, CA	8/20/86 - ongoing	Ducks	834	Avian botulism

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Vernal, UT	8/27/86 - 8/27/86	Snowy and cattle egrets, B. crowned night herons	40 (e)	Open ¹
Devil's Lake WMD, ND	8/14/86 - 9/15/86	Mallards, gadwalls, American coots, other	410	Avian botulism
City of Chesapeake, VA	9/29/86 - 9/29/86	Pekins, mallards	3-4	Lead poisoning
Hale Center, TX	9/27/86 - 10/14/86	Teals, pintails	140	Avian botulism
Edina, MN	7/10/86 - 7/29/86	Mallards	18	Avian botulism suspect ^{1/}
St. Paul, MN	9/04/86 - 9/10/86	Mallards	29	Avian botulism

e = estimated mortality

^{1/} = carcasses not examined

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

Pacific Flyway	- Kathryn Converse
Central Flyway	- Ronald Windingstad
Mississippi Flyway	- Chris Franson
Atlantic Flyway	- Tom Roffe

National Wildlife Health Center
6006 Schroeder Road
Madison, WI 53711
608-271-4640 or FTS 634-5411

- (a) Avian botulism was reported in 15 states, with estimated losses of 30,000 waterfowl and shorebirds in Montana and North Dakota alone. Investigation of concurrent outbreaks revealed that in addition to a drop in water level and high temperatures, other contributing factors included water alkalinity from surrounding soils, release of sewage effluent into source waters, and possibly exposure of birds to toxins. Several alternative water management and control activities were recommended following site visits to four locations.
- (b) The disappearance within 4 days of all adults from a rookery in Utah containing 50 nesting pairs of black-crowned night herons, snowy egrets, and cattle egrets remains a mystery. The offspring of these birds, ranging in age from hatchlings to fledgings, were found dead in their nests. The carcasses were too autolyzed to be of any value in the investigation.
- (c) Following isolation of duck plague virus from birds on a residential pond and spread of the virus to birds on a nearby lake in Burke, Virginia, depopulation and environmental decontamination were carried out. After the 441 resident ducks, geese, and swans were euthanized; the pond water was neutralized, then drained and the lake water was lowered and the surrounding ground was treated. Brush and ground litter was removed and the soil was treated with Environ-D. An effort was made to locate and monitor all ducks removed from the area prior to the outbreak and also to discourage new birds from coming into the area. Follow up virological testing of birds from this site and surrounding areas was negative. A similar protocol was used following another duck plague outbreak during June at a small zoo in Indiana.

- (d) Immature black skimmers died of exposure and dehydration in Freeport, Texas following 3 weeks of ground temperatures ranging up to 116° F. Adults had nested in a fenced-in parking lot surfaced with crushed seashells. There was no vegetation present for shade and water was not available nearby.
- (e) No source was identified for Chlamydia psittaci isolated from gulls found dead on an island in North Dakota. Continued surveillance of the island and surrounding areas indicated no further mortalities. The island was closed to recreational use and no human cases of chlamydiosis were reported.