

QUARTERLY DIE-OFF REPORT
 October 1986 - December 1986
 National Wildlife Health Center

| Location | Date | Principal species | Mortality | Principal cause of mortality |
|---------------------------|---------------------|--|-----------|--------------------------------------|
| Indianapolis, IN | 09/23/86 - 10/07/86 | Mallard, ?domestic | 20 | Undetermined |
| Columbus, OH | 10/01/86 - 10/01/86 | Mallard, domestic | 15 | Avian botulism |
| Harrington, WA | 10/19/86 - 10/28/86 | Mallard, Pintail, Redhead | 130 | Aspergillosis |
| Dimmit, TX | - 10/16/86 | Pintail, Blue winged teal | 3 | Avian botulism |
| Wilmington, DE | - 10/20/86 | Herring gull | 5 | Aspergillosis |
| Sacramento, CA | 10/23/86 - 11/30/86 | Mallard, Wigeon, Pintail Red-tailed hawk | 185 | Furadan poisoning |
| Lac Qui Parle WMA, MN | 10/11/86 - 11/25/86 | Canada goose | 1,500 | Undetermined |
| Lower Klamath NWR, CA | 11/04/86 - 11/04/86 | Mallard, Pintail | 40 | Toxin: OP suspect |
| Tule Lake NWR, CA | 11/07/86 - ongoing | Snow goose, Mallard, Wigeon, White-fronted goose | 3,550 (e) | Avian cholera |
| Lower Klamath NWR, CA | 11/07/86 - 12/29/86 | Snow goose, Mallard, Wigeon | 4,000 (e) | Avian cholera |
| New Deal, TX | 11/09/86 - 11/17/86 | Pintail, Shoveler | 60 (e) | Avian botulism suspect ^{1/} |
| Southern area, MA | 10/00/86 - 10/00/86 | Canada goose | 59 | Lead poisoning suspect ^{1/} |
| Derry, NH | 11/10/86 - 11/10/86 | Canada goose | 10 | Toxin: suspect |
| Bosque del Apache NWR, NM | 11/17/86 - 11/18/86 | Snow goose | 2 | Avian cholera |

| Location | Date | Principal species | Mortality | Principal cause of mortality |
|----------------------------------|---------------------|--|--------------|--|
| Cross Creeks NWR, TN | 11/17/86 - 11/17/86 | Canada goose | 1 | Parasitic Enteritis |
| Sacramento NWR, CA | 11/17/86 - ongoing | White-fronted goose, Pintail, Snow goose, Cackling goose | 700 | Avian cholera |
| Calverton, NY | 11/20/85 - 12/03/85 | Canada goose | 12 | Lead poisoning suspect ^{1/} |
| Spirit Lake Reservoir, AR | 11/20/86 - 11/21/86 | Mallard, Green wing teal, Cormorant | 300 | Toxin: Carbamate suspect |
| Rainwater Basin, NE | 11/20/86 - 01/06/87 | Snow goose, White-fronted goose, Canada goose, Mallard | 1,406 | Avian cholera |
| Lombard, IL | 11/15/86 - 11/30/86 | Canada goose, giant | 36 | Lead poisoning |
| Marian Reservoir, KS | 11/23/86 - 11/23/86 | Cormorant | 37 | Renal coccidiosis, Gastric parasitism |
| Frederick, MD | 10/13/86 - 10/20/86 | Gray fox | 8-9 (e) | Toxin suspect |
| Squaw Creek NWR, MO | 11/28/86 - 12/10/86 | Snow goose, Mallard | 1,300 300 | Avian cholera Lead poisoning |
| Colusa NWR, CA | 12/02/86 - 01/09/87 | Snow goose, Ross' goose | 106 | Avian cholera |
| Butte Sink NWR, CA | 11/17/86 - 01/08/87 | Pintail, Wigeon, Ruddy, Coot | 1,065 | Avian cholera, Lead poisoning |
| Riverton, Forney, Hamburg, IA | 12/02/86 - 12/30/86 | Snow goose, Mallard | 2,300 | Avian cholera |
| Red Rock Lakes, MT | - 12/05/86 | Trumpeter swan | 1 | Lead poisoning |
| Gaines County, TX | 12/15/86 - 01/03/87 | Sandhill crane | 75 (e) | Toxin: mycotoxin suspect |
| Desoto NWR, IA | - 12/30/86 | Snow goose | 99 (e) | Avian cholera |

| Location | Date | Principal species | Mortality | Principal cause of mortality |
|--------------------|---------------------|--|-----------|------------------------------|
| Reno, NV | 12/17/86 - 12/17/86 | Wigeon | 25 | Toxin: OP suspect |
| Grulla NWR, NM | 11/28/86 - 01/12/87 | Sandhill crane | 235 | Toxin: mycotoxin suspect |
| Delevan NWR, CA | 12/08/86 - ongoing | Snow goose, Ross' goose Shoveler | 326 | Avian cholera |
| Chicago, IL | 12/28/86 - 12/30/86 | Mallard | 3 | Toxin: petroleum suspect |
| <u>Update*</u> | | | | |
| Colusa NWR, CA | 08/15/86 - 09/05/86 | Mallard, Snowy egret | 6 | Avian botulism <u>1/</u> |
| St. Paul, MN | 09/04/86 - 10/31/86 | Mallard, Canada goose | 95 | Avian botulism |
| Delevan NWR, CA | 08/20/86 - 10/30/86 | Mallard, Wigeon, Coot, G.W. Teal, Pintail | 1,184 | Avian botulism |
| Sacramento NWR, CA | 08/01/86 - 10/30/86 | Pintail, Mallard, G.W. Teal, Coot | 969 | Avian botulism |

(e) = estimated mortality

1/ = no carcasses submitted

* = final mortality information, from cases ongoing last quarter

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, Wisconsin 53711, USA
(608) 271-4640 or FTS 634-5411

National Wildlife Health Center Quarterly Mortality Report. The following summarizes bird mortalities reported by NWHC for October-December 1986.

A nearby dump of moldy waste grains appeared to be the source of Aspergillus fumigatus and Rhizopus sp. that caused acute mycotic pneumonia in 130 mallards, during October, in Washington. There is some evidence that preformed toxins (aflatoxins) may also have been present in the grain. There were no mortalities reported after this grain pile was removed.

Hundreds of Canada geese died from an as-yet undetermined cause in western Minnesota during October and November. Geese were emaciated and had esophageal impactions that contained green vegetation and small amounts of corn. Clinical signs and gross lesions resembled those of the few Canada geese dying on the same area from lead poisoning except there was no ingested lead shot. Analyses of tissues for heavy metals were within normal limits. Additional laboratory tests are pending.

Nebraska's Rainwater Basin experienced their second fall avian cholera outbreak in late November. Snow geese comprised 57% of the 1,304 waterfowl picked up in a reservoir southwest of Clay Center. This reservoir was the site of the other fall outbreak in 1984 in which 550 waterfowl were picked up (48% white fronts, 31% mallards).

During November an undetermined number of mallards, green winged teal, and cormorants died at Spirit Lake Reservoir, 25 miles east of Texarkana, Texas. Arkansas Game and Fish personnel indicated that a large number of fish had also been found dead at the 150 acre reservoir. Necropsy of waterfowl carcasses submitted to NWHC yielded no indications of infectious disease. Reversible brain cholinesterase depression was found in four carcasses and a diagnosis of suspect carbamate toxicosis was issued. USFWS's Environmental Contaminants program is following up on this case.

Kathryn Converse, NWHC