

QUARTERLY DIE-OFF REPORT
 July 1987 - September 1987
 National Wildlife Health Research Center

Location	State	Date	Species	Mortality	Causes
Rosemont	IL	05/15/87-08/19/87	Duck, Mallard Duck, Mallard(cross) Duck, Pekin	475(e)	Botulism type C
Denver	CO	05/15/87-10/04/87	Duck, Mallard Night-Heron, Bl. Crowned Goose, Canada Duck, Domestic	143	Botulism type C
Richfield	MN	05/30/87-07/26/87	Duck, Mallard	80(e)	Botulism type C suspect <u>1</u> /
Cody	WY	06/15/87-07/22/87	Goose, Emperor Goose, Canada Goose, Russian Duck, Gadwall	85(e)	Pneumonia
Medicine Lake NWR	MT	06/24/87-09/18/87	Duck, Green-winged Teal Duck, Blue-winged Teal Duck, Mallard Duck, Shoveler	5778	Botulism type C
Kodiak Island	AK	06/25/87-07/05/87	Otter, Sea	55(e)	Undetermined <u>1</u> /
Bowdoin NWR	MT	06/29/87-09/09/87	Coot, American Duck, Wigeon Duck, Green-winged Teal	757	Botulism type C
Orland Park	IL	07/03/87-08/16/87	Duck, Mallard Duck, White	143	Botulism type C suspect <u>1</u> /
Lewes	DE	07/06/87-09/15/87	Dolphin, Bottle-nosed	150(e)	Undetermined
Green Bay	WI	07/07/87-09/22/87	Gull, Ring-billed Gull, Herring Tern, Forster's	350(e)	Botulism type C Aspergillosis; Emaciation

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Dayton	OH	07/10/87-07/21/87	Duck, Mallard Duck, Mallard (cross) Duck, Muscovy Duck, Pekin	100	Botulism type C
Virginia Beach	VA	07/13/87-08/11/87	Duck, Mallard (cross)	100	Botulism type C
Western Oregon NWR	OR	07/15/87-ongoing	Murre, Common	1147	Emaciation
Sand Lake NWR	SD	07/15/87-08/20/87	Pelican, White Cormorant, Double-crested	45(e)	Open Botulism; Emaciation
Lake Nettie NWR	ND	07/15/87-09/09/87	Duck, Mallard Duck, Gadwall Duck, Pintail Duck, Blue-winged Teal	572	Botulism type C
Iosco Co.	MI	07/16/87-07/23/87	Duck, Mallard	29	Botulism type C suspect <u>1</u> /
Waubay NWR	SD	07/17/87-09/04/87	Ducks Shorebirds Gulls Pelican, White	6300	Botulism type C
Lisle	IL	07/17/87-07/31/87	Duck, Mallard Duck, Merganser	51	Botulism suspect <u>1</u> /
Alexandria	VA	07//19/87-07/19/87	Duck, Mallard	15	Undetermined
Houston	TX	07/20/87-07/20/87	Stilt, Black-necked Egret, Snowy Duck, Mottled	300(e)	Botulism type C
Fort Meyer	VA	07/24/87-07/24/87	Duck, Mallard	7	Botulism type C
East Dubuque	IL	07/24/87-07/31/87	Duck, Mallard	36	Botulism type C
Devils Lake WMD	ND	07/24/87-09/11/87	Duck, Mallard Coot, American Duck, Gadwall Duck, Pintail	9599	Botulism type C Emaciation

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St. Joseph Co.	MI	07/26/87-08/01/87	Duck, Mallard	12	Botulism suspect <u>1</u> /
J. Clark Salyer NWR	ND	07/27/87-09/07/87	Duck, Blue-winged Teal Duck, Green-winged Teal Duck, Mallard Duck, Shoveler	1420	Botulism type C
Wayne Co.	MI	07/29/87-08/05/87	Duck, Mallard	9	Botulism suspect <u>1</u> /
Newport	OR	07/30/87-ongoing	Auklet, Rhinoceros	74	Emaciation
Market Lake WMA	ID	07/30/87-09/09/87	Duck, Green-winged Teal Duck, Pintail Duck, Mallard Duck, Shoveler	2041	Botulism Type C
Kulm WMD	ND	08/01/87-10/01/87	Duck, Teal Duck, Pintail Duck, Mallard Duck, Shoveler	808	Botulism type C
Barrington	IL	08/03/87-08/19/87	Duck, Mallard	5	Botulism suspect <u>1</u> /
Indianapolis	IN	08/05/87-09/11/87	Duck, Mallard Goose, Canada	44	Botulism type C
Rockford	IL	08/05/87-08/05/87	Robin, American Blackbird	6	Trauma
Columbus	OH	08/06/87-08/20/87	Duck, Mallard	23	Botulism suspect <u>1</u> /
Marblehead	OH	08/07/87-08/28/87	Duck, Mallard (hybrid) Heron, Great Blue	50(e)	Botulism type C Trauma
Shoreview	MN	08/09/87-08/18/87	Duck, Mallard Duck, Wood	14	Botulism type C

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Bismark, ND Game & Fish (Seven Locations)	ND	08/10/87-09/30/87	Duck, Pintail Duck, Mallard Duck, Blue-winged Teal Duck, Green-winged Teal	9000	Botulism type C
Glenview	IL	08/11/87-08/20/87	Duck, Mallard	12	Botulism suspect <u>1</u> /
White Lake NWR	ND	08/13/87-08/29/87	Duck, Mallard Duck, Pintail Duck, Unidentified Coot, American	91	Open
Cedar Point	OH	08/17/87-08/17/87	Duck, Mallard	7	Botulism type C suspect <u>1</u> /
Valentine NWR	NE	08/19/87-10/06/87	Duck, Unidentified Coot, American	487	Botulism type C
Lake Pewaukee	WI	08/25/87-10/09/87	Duck, Mallard	20	Toxin: organophosphate susp.
Lake Andes NWR	SD	08/27/87-09/14/87	Duck, Blue-winged Teal Duck, Mallard Duck, Green-winged Teal Duck, Pintail	598	Botulism type C
Blue Ash	OH	09/07/87-10/01/87	Duck, Mallard (cross)	32	Botulism type C
Deer Flat NWR	ID	09/08/87-09/18/87	Coot, American Gull, Ring-billed	156	Open
Chatham	MA	09/10/87-09/21/87	Gull, Herring	5	Aspergillosis
<u>Update*</u>					
Lower Klamath NWR	CA	06/22/87-09/28/87	Duck, Wigeon Duck, Shoveler Duck, Pintail Duck, Gadwall	11,701	Botulism type C Fibrinous peritonitis, Tuberculosis
Horicon NWR	WI	06/07/87-09/20/87	Duck, Mallard Duck, Wood Coot, American	180	Botulism type C

National Wildlife Health Research Quarterly Mortality Report.

The following summarizes bird mortalities reported by NWHRC for July-September 1987.

NWHRC received reports of 45 wildlife disease die-offs. The primary cause of mortality was avian botulism type C (80%).

Avian botulism was confirmed or suspected as cause of death for 58,795 waterfowl and shorebirds in 51 epizootics; a few started as early as June 1987 and some are continuing through November 1987. National Wildlife Refuges reported 19 die-offs, and State Wildlife Management areas reported 10; scattered low-level mortality occurred at 22 residential or municipal areas. Heaviest losses occurred in the central and Pacific Flyways with approximate carcass pick-ups of 34,628 and 22,151 respectively. Over 10,000 carcasses were picked up on Lower Klamath NWR in California during September alone.

Annual die-offs in common murre chicks along the coast of Oregon have been reported for several years. Chicks are reared at sea for 6-8 weeks and are often subject to harsh environmental conditions, which may contribute to the mortality. This year, mortality in murre chicks was first noted at the end of July and is still continuing in Tillamook and Clatsop counties. Immature rhinoceros auklets began washing ashore about August 1. If the rhinoceros auklet population has not expanded significantly beyond the 200 estimated during the 1979 census of Oregon coast seabirds, this year's mortality of young auklets could represent a total reproductive failure. Mortality during September and October represent the largest losses of murrees and auklets recorded for that area.

A group of 55 sea otters, primarily young males, was found dead along the Alaskan coast in late June and early July. Paralytic shellfish poisoning was suspected but not confirmed. This Center has not examined any of the otters to date.

Tissues and cultures from dolphins that died in the mysterious dolphin die-off off the East Coast were submitted to our Center from New Jersey. Many bacteria were isolated, all of which can be considered normal to the marine environment, but which might become invasive and damaging to the animal under conditions of stress. No definitive diagnosis was established.