

Record Numbers of Sea Turtle Strandings in Virginia in May and June 1998.

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The Virginia Institute of Marine Science (VIMS) has evolved since 1979 as the stranding center and repository for all sea turtles stranded in Virginia. This data is sent to the National Marine Fisheries Service (NMFS) annually. Seasonally a network of trained volunteers from state, federal, local and private organizations collect data from stranded and incidentally captured sea turtles. In 1997 the sea turtle stranding network in Virginia responded to 259 reports of sea turtles (220 loggerheads (*Caretta caretta*), 21 Kemp's ridleys (*Lepidochelys kempii*), 12 leatherbacks (*Dermodochelys coriacea*) and 6 unidentified species). By the 16th of June 1998 we have responded to 188 strandings, (182 loggerheads, 3 Kemp's ridleys, 2 leatherbacks, and 1 unidentified species) which makes up more than 73% of last year's total.

The 1998 stranding season began the 18th of May with 3 loggerheads stranding on the ocean side of Virginia Beach. By the end of the first "calendar" week (Sunday-Saturday), 11 loggerheads had stranded along the Virginian ocean front and southern Chesapeake Bay. By the 26th of May (second week of strandings) up to 10 loggerheads a day were stranding on the beaches of: the southern Bay and ocean sides of the Eastern Shore and Virginia Beach. The major stranding peak began June 4th (week 3) and appeared to end on the 14th of June (Week5) (Table 1). During this, 10 day, period 119 loggerheads and 3 Kemp's ridleys had stranded in and around the Lower Chesapeake Bay. Loggerheads stranded primarily in the southern Bay (44%); the ocean side of Eastern shore (27%) and Virginia Beach (20%); the western side of the Bay made up only 9% of the strandings (Table 2). Two of the 3 Kemp's ridleys stranded on June 4th in Virginia Beach and Northampton counties, the third on June 11th in Northumberland county.

The historical stranding data clearly show that more than half of the yearly turtle deaths occur in May and June of the year when the turtles first enter the Bay (Table 3). The trends in loggerhead stranding location viewed by year (Table 4, Figure 1) show a steadily increasing number of deaths in all

areas in recent years. Similar trends are seen for Kemp's ridleys and leatherbacks (Figures 2,3). This year so far there has been a large jump in the number of strandings in all regions of the Bay, particularly the southern Bay. There has also been an abrupt increase in the number of loggerhead strandings on the beaches of Fishermans island, Kiptopeke State Park and Sunset beach areas of Northampton county. It is very likely that this increase is due to an increase in commercial fishing, particularly the spring gill net fisheries (Terwilliger and Musick 1995).

Literature Cited

Terwilliger, K. and J.A. Musick (co-chairs), Virginia Sea Turtle and Marine Mammal Conservation Team. 1995. Management Plan for Sea Turtles and Marine Mammals in Virginia, Final Report to the National Oceanic and Atmospheric Administration. 56pp.

Table 1. Number of loggerhead (Cc), Kemp's ridley (Lk), and leatherback (Dc) sea turtles stranded by calendar week in 1998.

Week	Cc	Lk	Dc
17-23 May	11	0	0
24-30 May	38	0	1
31 May-6 Jun	39	2	1
7-13 Jun	82	1	0
14-16 Jun	11	0	0

Table 2. Number of loggerhead deaths by zone and week.

Date	Western Bay	Southern Bay	Eastern Shore, Ocean	Virginia Beach, Ocean
18-23 May	0	2	4	5
24-30 May	2	20	8	8
31 May-6 Jun	4	20	10	5
7-13 Jun	8	31	27	16
14-16 Jun	2	7	0	2

Table 3. Yearly loggerhead strandings, and combined May-June strandings from 1 January 1990 through 16 June 1998. Also included is the percentage of the yearly strandings are comprised of the May-June stranding peak.

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998
May & June Total	145	68	60	124	87	74	104	159	182
Yearly Total	250	130	142	196	174	119	122	220	182
% of May-June from Total	58	52.3	42.3	63.3	50	62.2	85.2	72.3	100

Table 4. Location and numbers of loggerhead strandings recorded for the years 1990 through 1998. This list includes all May and June loggerhead strandings from 1990 to 1997.

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998**
Maryland	4	3	0	10	5	1	0	2	1
Eastern Shore, Bay	8	0	1	9	1	0	0	1	1
Western Bay	31	14	15	28	23	2	27	26	16
Southern Bay	37	22	19	33	25	22	17	39	80
Eastern Shore, Ocean*	31	8	14	29	18	28	32	48	49
VA Beach, Ocean	34	21	11	15	15	21	28	43	36

* Eastern Shore Ocean consists of all strandings on the ocean side of Accomack and Northampton counties and strandings up to and including Kiptopeke State Park.

** Only data from May 1st through 16 June 1998 is presented.

Figure 1. Map of the lower Chesapeake Bay, broken into 6 stranding regions: Western Bay, Southern Bay, Virginia Beach Ocean, Eastern Shore Ocean, Eastern Shore Bay and Maryland.

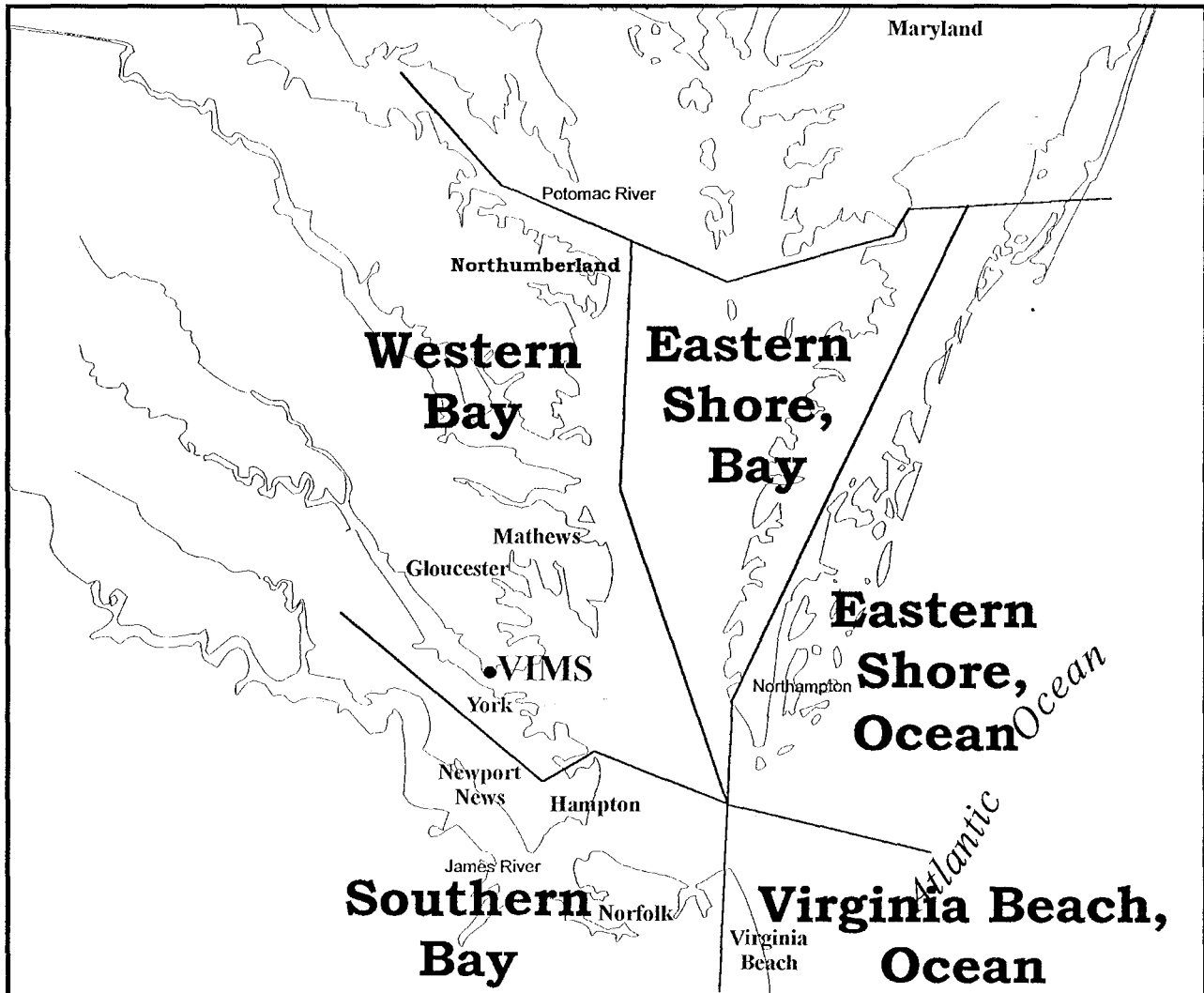


Figure 2. Loggerhead sea turtle deaths for May and June compiled by location and year. The 1998 data consists of data from May 1st to June 16th.

