

## **Guillemots on the islands south east of Vinalhaven during the 2000 season.**

In an effort supported by the Maine Department of Inland Fisheries and Wildlife, the Petit Manan National Wildlife Refuge and the Vinalhaven Land Trust. Mink were trapped off the seabird nesting islands south east of Vinalhaven during the late 90's, and the local Black Guillemot population has been monitored. This effort resulted in the reestablishment of successful Guillemot colonies on the islands in '98 and 99.

The following describes guillemot population monitoring efforts and results during the 2000 season. Supported by the Petit Manan National Wildlife Refuge.

A visit was made to Otter Island to look for sign of mink on May 15, no sign of mink was found and so no mink traps were set. A count of adult Guillemots around the islands was made the same day, this number gives an idea of the population interested in the islands. the results were similar to those of '99 and are displayed on the table attached.

As during other years a search of the shoreline of each island was made early in August to determine the success of the Guillemots nesting efforts, those results are also shown on the attached table.

The results of this years nest site search indicate that at least one mink found its way to these islands during the breeding season and disrupted the Guillemots breeding effort. The total number of sites on all four islands that hatched chicks, indicated by the presence of chick guano, was down from 123 in '99 to 58 in 2000. Especially drastic decreases occurred at Carvers from 41 in '99 to 6 in 2000 and Hay from 11 in '99 to 3 in 2000.

The total number of sites at which dead eggs were found was 13 in '99 compared to 45 in 2000. Apparently the disturbance that caused the failure occurred after eggs were laid. A site with a pile of chick guano leaking out from under the rocks is much more conspicuous than is a site with just an egg so that the number of sites that failed before hatching is likely to be a lower percentage of reality than is the number of sites at which chicks were hatched.

The apparent success of the Guillemots at Roberts in 2000 was similar to that in '99, though there was clear evidence of a visit by a mink as one of the two dead chicks found there had a neck wound characteristic of one killed by a mink. Perhaps the mink made a short visit to the island or perhaps it was still there and may have finished off those live chicks we found in the days that followed our visit.

On Otter island where 6 of 7 of the mink had been trapped the number of nest sites at which chicks were hatched dropped from 53 in '99 to 34 in 2000. While the number of live chicks found dropped from 18 in '99 to 4 in 2000. Some of the decrease in live chicks found was probably due to the later date of the search of the site rich southern end of the island searched on the 5<sup>th</sup> of August in '99 and the 11<sup>th</sup> in 2000. But the total number of sites found at which there was guano but no chick was seen (thus may have already fledged a chick) also dropped from 36 in '99 to 25 in 2000. The number of sites on Otter at which dead eggs were found rose from 7 in '99 to 18 in 2000 indicating disturbance in June during the time most Guillemots would be incubating.

Carvers the Island in the group closest to Vinalhaven, the source of the mink, had the most drastic decline in Guillemot success. There were only 6 sites found in 2000 at which chicks were hatched compared to 41 in '99. There were only 3 live chicks found in 2000 compared to 24 in '99. There were 20 sites found in 2000 with dead eggs, compared to 3 in '99. Apparently the mink arrived early enough in the season to scare most of the adult guillemots into abandoning their eggs.

Hay island there were three sites at which we judged that chicks were hatched this season compared to 11 in '99. There was one live chick found compared to 7 in '99 and 4 sites were found with dead eggs compared to 0 in '99.

**Recommendations:**

The presence of Petrels and a large number of adult Guillemots around the islands in '95, during the most recent Mink occupation, suggests that the Mink hadn't been there for many years. Perhaps harsh winters have eliminated mink who had established themselves on these Islands in the past. The return of at least one mink just two years after mink had been trapped off indicates a large and expansive source population on Vinalhaven or perhaps just bad luck.

At this point I think continued monitoring of the Guillemot population and no effort to trap the mink for a couple of years would be appropriate.

## Guilemot productivity 95-2000

				#			#		
		Total	Guano no	Sites W	total	Site w	Sites w		May
	Count	Live	Chick	Dead	Sites W	Dead	Dead		High
Island	Date	Chicks	Seen	Chicks	Guano	Adult	Eggs		Counts
Otter 2000	11-Aug	4	25	7	34	8	18		227
Otter 99	5-Aug	18	36	5	53	1	7		200
Otter 98	5-Aug	10	8	2	17	0	1		101
Otter 97	8-Aug	0	2	4	6	4	3		78
Otter 96									120
Otter 95	3-Aug	0	0	2	1	6	6		200
Roberts 2000	4-Aug	9	6	2	15	0	3		65
Roberts 99	4-Aug	10	9	2	18	0	3		68
Roberts 98	5-Aug	6	0	0	4	1	5		52
Roberts 97	1-Aug	4	1	4	7	1	3		47
Roberts 96	3-Aug	0	0	0	0	1	4		110
Roberts 95	2-Aug	5	6	4	13	0	0		98
Hay 2000	4-Aug	1	2	0	3	1	4		44
Hay 99	3-Aug	7	6	0	11	1	0		51
Hay 98	4-Aug	8	1	2	8	0	0		46
Hay 97	4-Aug	0	0	1	1	2	3		17
Hay 96	6-Aug	0	2	0	2	0	1		72
Hay 95	1-Aug	0	2	0	2	0	2		45
Carvers 2000	2-Aug	3	4	5	6	7	20		143
Carvers 99	3-Aug	24	21	4	41	3	3		156
Carvers 98	4-Aug	10	20	2	29	1	3		156
Carvers 97	4-Aug	3	2	9	12	3	3		147
Carvers 96	3-Aug	2	2	8	10	4	5		154
Carvers 95	1-Aug	9	5	4	15	4	1		99
Brimstone 99									363
Brimstone 98	7-Aug	61	46	0	93	2	2	na	
Brimstone 97	6-Aug	59	21	8	74		18		310
Brimstone 96	4-Aug	79	24	3	84	1	4		354
Brimstone 95									305

## **Guillemot nest search results on carvers Roberts, Hay and Otter Islands August 2000.**

What was found at each site is listed in the order that it was noticed. If Kirn is listed first then one of our old kirn marking a nest site found during our site searches on previous years brought our attention to the site.

### **Carvers Island,**

August 2, 2000, five observers,

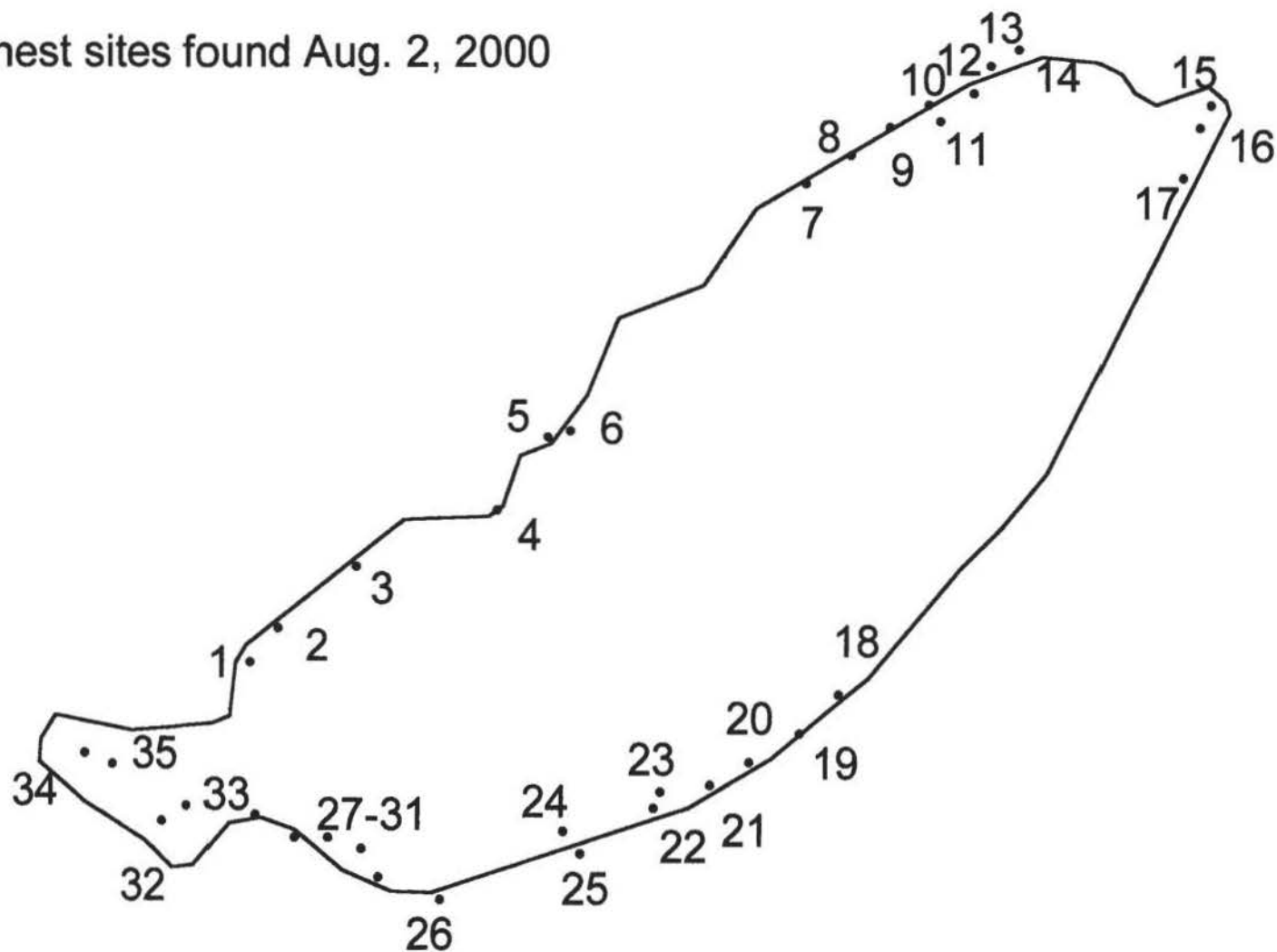
@09:00- 12:30

#### **Site number,**

- 1, Guano, no chick seen.
- 2, Guano, 1 two week old dead chick with pin feathers.
- 3, Dead lone egg.
- 4, Two dead eggs.
- 5, Dead egg near Kirn.
- 6, Two dead eggs.
- 7, Dead adult, 2 dead eggs.
- 8, Dead adult.
- 9, Two dead eggs half developed and dead adult,
- 10, Dead adult.
- 11, Dead adult, dead egg, Kirn
- 12, Kirn, dead egg contents runny, no chick.
- 13, Dead chick, Kirn.
- 14, Two dead eggs, not developed, no adult seen.
- 15, Two dead eggs, dead adult.
- 16, Egg shell, egg.
- 17, Dead egg.
- 18, Dead egg.
- 19, Part of a dead chick.
- 20, Dead adult, part of a dead chick.
- 21, Mink Scat.
- 22, Two dead eggs.
- 23, Two dead eggs, not developed.
- 24, Egg dead?
- 25, Dead egg.
- 26, Guano, no chick seen.
- 27, Egg, guano, 1 two week old chick.
- 28, Guano no chick seen, dead chick near.
- 29, Two dead two and a half week old chicks.
- 30, Guano, 2 live 3 ½ week old chicks.
- 31, Dead egg.
- 32, Dead egg.
- 33, Guano, no chick seen, the crack.
- 34, Two dead eggs.
- 35, Dead egg.

# Carvers Island Guillemots 2000

Guillemot nest sites found Aug. 2, 2000



**Roberts Island,** August 4, 2000, three observers  
partly cloudy, Light west wind.  
09:30 -12:00

site #,

- 1, Kirn 2 three and a half week old chicks.
- 2, Guano, at least one chick, @ 3 weeks old.
- 3, Guano, No chick seen, lots of guano, probable fledge.
- 4, Two dead eggs, one egg hatched, guano, no chick seen probable fledge.
- 5, Guano, no egg, last years?
- 6, Guano, No chick, possible fledge, can see all of the chamber.
- 7, A lot of guano, No chick.
- 8, Guano a lot egg shell No chick seen.
- 9, Guano, 2 two and a half week old chicks.
- 10, dead chick, dead egg.
- 11, A lot of guano, 2 love 3 week old chicks.
- 12, Dead egg, 1 three and a half week old chick, guano, Kirn.
- 13, Guano, Kirn, dead chick with neck wound dead @6 days, dead egg.
- 14, Guano, 1 two week old chick, Kirn.
- 15, Guano, egg shell.

We also found 3 fledgling herring gulls that had been recently eaten by eagles.

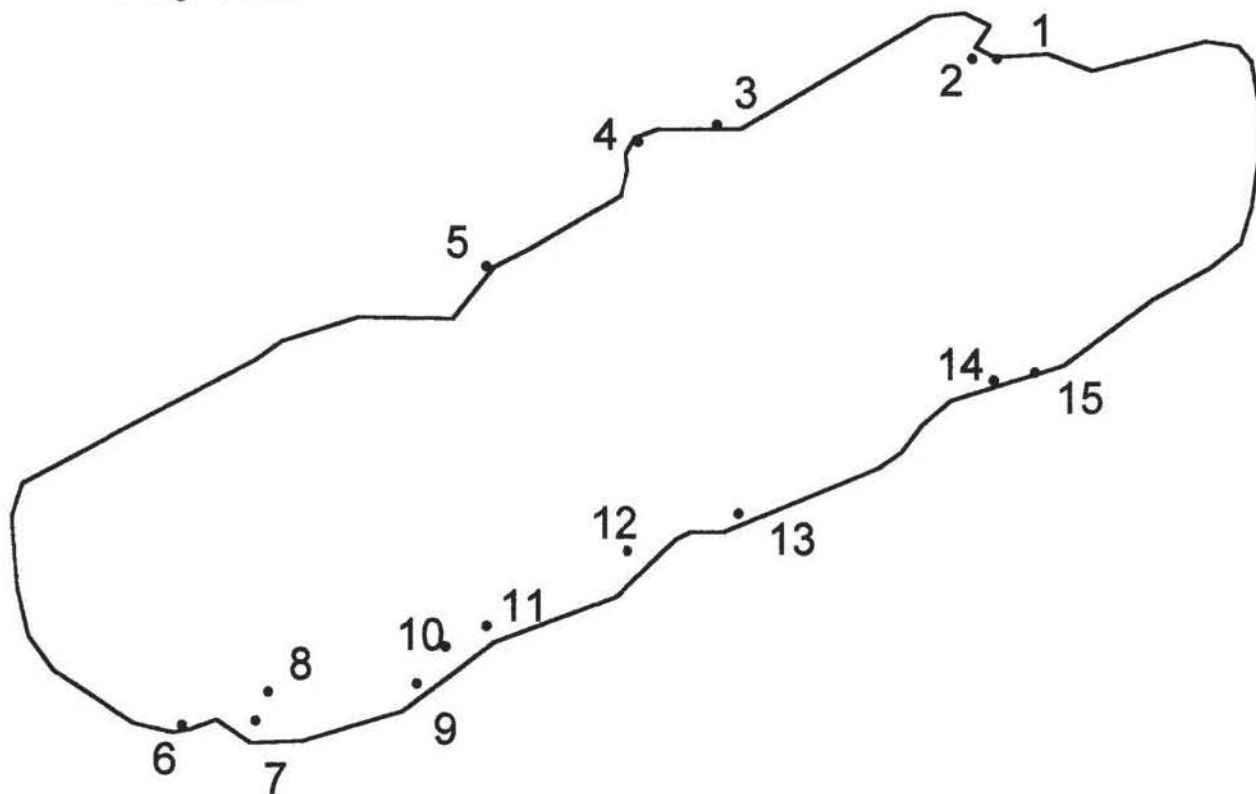
**Hay Island,**  
August 4, 2000, three observers  
Sunny calm, 13:00- 14:05

site #,

- 1, Two dead eggs.
- 2, Two dead eggs and a kirn.
- 3, Kirn, guano, last years?
- 4, Guano, no chick seen.
- 5, Dead adult, dead egg.
- 6, Guano Kirn, 1 two week old chick.
- 7, Dead egg.
- 8, Guano a lot, No chick, possible fledge

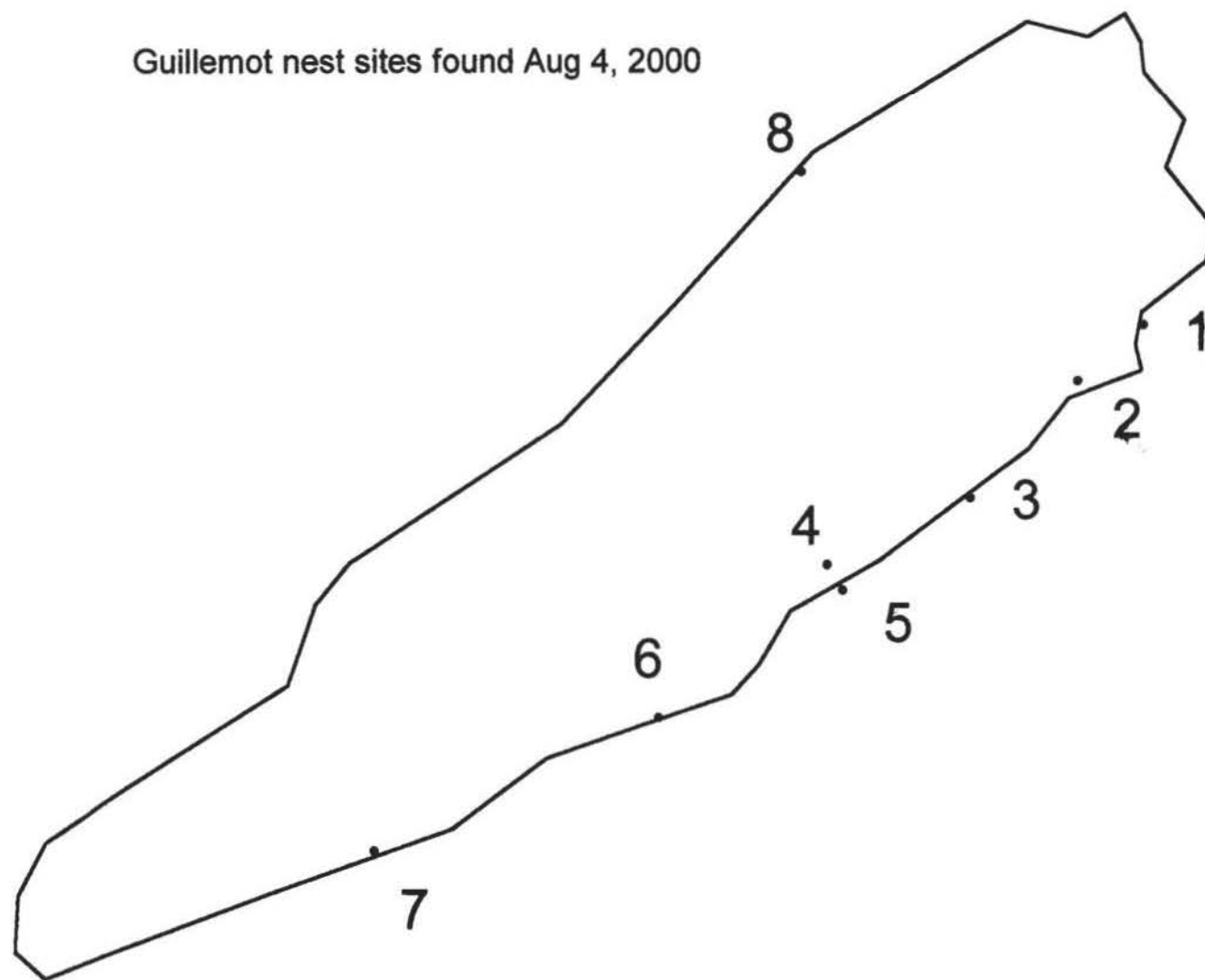
# Roberts Island Guillemots 2000

Guillemot nest sites found Aug. 4, 2000



# Hay Island Guillemots 2000

Guillemot nest sites found Aug 4, 2000





**Otter Island,**

August 8, 2000, five observers 09:20- 12:00.

August 11, five observers. 09:30-14:30

**Site #,**

- 1, Dead lone egg, this years.
- 2, Kirn, Dead adult.
- 3, Dead egg.
- 4, Egg shell, guano, dead 3 week old chick, dead for @ 2 weeks.
- 5, Dead hatching chick.
- 6, Dead egg.
- 7, Kirn, 2 dead eggs.
- 8, Kirn, egg shell, 2 dead eggs, this years not developed.
- 9, Egg shell, Kirn, dead egg, old guano.
- 10, Two dead eggs not developed, Kirn.
- 11, Dead eggs, dead adult.
- 12, Guano?
- 13, Kirn, Guano, old eggshell.
- 14, Guano, egg shell,
- 15, Dead egg.
- 16, Old guano.

-----end August 8,-----

**begin August 11.**

- 17, Guano, No chick seen, possible fledge, no Kirn.
- 18, Guano, eggshell.
- 19, Dead adult, Kirn, eggshell. Guano.
- 20, Eggshell, guano, 1 week old chick, dead egg.
- 21, Dead ancient chick.
- 22, Dead adult, dead egg.
- 23, Kirn, guano, no chick seen.
- 24, Kirn, guano, 1 three week old chick.
- 25, Guano, no chick seen.
- 26, Kirn, guano, no chick seen.
- 27, Kirn, guano, no chick seen.
- 28, Guano, no chick seen.
- 29, Guano egg shell.
- 30, Dead adult.
- 31, Guano, no chick seen, Kirn.
- 32, Dead adult, dead chick, dead egg, eggshell.
- 33, Dead egg.
- 34, Guano, no chick seen.
- 35, Guano, no chick seen.
- 36, Two dead eggs.
- 37, Guano, old Kirn, dead chick.
- 38, Guano, no chick seen, kirn.
- 39, Kirn, guano, dead chick.
- 40, Guano, old Kirn.
- 41, Kirn, guano.
- 42, Guano, no chick seen.
- 43, Guano, no chick seen.
- 44, Guano, egg shell.
- 45, Guano, no chick seen.

**Site #**

- 46, Guano, no chick seen.
- 47, Guano, no chick seen, Kirn.
- 48, Guano, 2 four week old live chicks.
- 49, Guano a lot, no chick seen.
- 50, Guano, eggshell, very little guano.
- 51, Guano a lot, no chick seen, can't see the chamber.
- 52, Kirn, guano, dead chick.
- 53, Kirn, dead chick.
- 54, Kirn, egg, dead adult.
- 55, Two dead eggs, clear fluid. Last years Dead egg hatching.
- 56, Two dead eggs, guano.
- 57, Eggshell.

# Otter Island Guillemots 2000

Guillemot nest sites found on Aug. 8 and 11, 2000

