A SURVEY OF NESTING HERRING GULLS

ON SELECTED SITES, ALONG THE NORTH SHORE OF LAKE SUPERIOR

FROM KNIFE RIVER TO THE PIGEON RIVER - 1989

Don L. Goodermote

Prepared for the Minnesota Department of Natural
Resources, Non-Game Wildlife program
August 30, 1989

Monday At 19

Comments

The total North Shore nesting count obtained by expanding the monitor date indicates there are 9,037 nests within the survey area. In past years this method has yielded total North Shore population estimates which were very close to the actual number. During this years inventory, observations of non-monitor sites indicated that movement of birds was occuring which would not be detected on the monitor sites. The first indication was the abundance of birds at Encampment Island site #79, while the monitor site for this group, site #80, showed a sharp decline in nest numbers. The second indication was the absence of birds at site #68 within the Silver Bay Group and the increase in nests on monitor sites #70 and #64.

A count of nests on sites #64 through #80 indicated the monitor data was not yielding reliable data for the Silver Bay, Encampment-Knife Island Groups.

During the 1984 inventory it was noted that an unusual amount of predation was taking place on site #68. Fox were thought to be the predator. A count of this site in 1989 revealed nest numbers were down from 811 in 1984 to 137. The effect of this movement or shift of nesting sites is not fully known. I believe the increases on sites #75, #70, #70A, #71 & #79 are the result of these displaced birds and do not represent a substantial growth in the nesting populations of the two groups. An analysis of the larger sites available indicates birds displaced at site #68, selected for similar habitat within a reasonable distance. The following is a more realistic estimate of the Herring Gull nesting populationalong the North Shore of Lake Superior.

Group	Number of Nesting Pairs	How Obtained
Suzie	1,985	expansion of monitor site data
Blueberry	721	expansion of monitor site data
Marr	311	expansion of monitor site data
Grand Marais	178	expansion of monitor site data
Lutsen	73	expansion of monitor site data
Taconite Harbor	1,487	expansion of monitor site data
Illgen City	45	expansion of <u>new</u> Silver Bay data
Silver Bay	1,303	actual count
Split Rock	315	actual count
Encampment & Knife Island	1,520	actual count
TOTAL NESTS	7,938 + site #70	A(74) = 8,012

Notes on 1989 Survey

Suzie Island Group - Date Visited: 5/22/89

- * No hatching taking place on May 22nd
- * Most nests had three eggs 121 nests
- * Remainder had one or two eggs 86 nests
- * Nests were in good condition
- * No indication of predation
- * Frogs heard on Island #16
- * Sites counted: #12, #13 & #16

Blueberry Island Group - Date Visited: 5/22/89

- * No hatching occuring on May 22
- * Majority of nests had three eggs 213 nests
- * Remainder had one or two eggs 175 nests
- * Two destroyed nests were found on Island #24. Crows are believed to have been the cause.
- * Crows sighted on Island #25
- * Nests were in good condition
- * Mallard nest with nine eggs on #23
- * Sites counted: #23, #24 & #25

Marr Island Group - Dated Visited: 5/16/89

- * No hatching occuring on May 16
- * 164 nests contained three eggs
- * 104 nests had one or two eggs
- * The percentage of one to two egg nests was highest on the seaward side of the island as opposed to the land side: 58% to 26%
- * No migrant shore birds seen to early?
- * Sites counted: #31

Grand Marais Group - Date Visited: 5/16/89 and 5/22/89

- * No hatching occuring on either date
- * Island #37 was visited on 5/16 and 58% of the nests contained one or two eggs
- * Island #36 was visited on 5/22 and 38% of the nests contained one or two eggs
- * No sign of predation
- * Nests in good shape
- * Sites counted: #36 & #37

Taconite Harbor Group - Date Visited: 5/21/89

- * No hatching occuring on May 21
- * Most nests contained three eggs 947 nests
- * One and two eggs accounted for 36% of the total nests 531 nests
- * No sign of predation
- * Island #48 had one pair of Canada Geese incubating eggs. Another nest was found which appeared to have been destroyed.
- * Island #49 had two pair of Canada Geese. One pair incubating eggs.

 The second pair had successfully hatched three young.
- * Nests in good condition
- * Sites counted: #48 & #49

Silver Bay Group - Date Visited: 5/12/89

- * No hatching occuring on May 12
- * Most nests contained three eggs 195 nests
- * Remaining nests had one or two eggs 129 nests
- * Nests in good condition

- * No sign of predation
- * Sites counted: all sites
- * Site #66 pair or Canada Geese nesting, male was banded on left leg
- * During the monitoring it was observed that site #68 had very few birds. This is not a monitor site, however, has been the largest nesting site within this group
- * A count of this site revealed a substantial drop in the number of nests which was not reflected in the monitor sites.

Split Rock Group - Date Visited: 5/20/89

- * No hatching occuring on May 20
- * 22% of the nests had one or two eggs 31 nests
- * Remainder contained three eggs 111 nests
- * No sign of predators
- * Sites counted: all sites

Knife River Island Group - Date Visited: 5/10/89 & 6/5/89

- * No hatching occuring on May 5
- * Most nests contained three eggs, only a few with one or two eggs on first visit
- * 90% hatched on second visit (June 5) and chicks large, some with tail feathers
- * A few dead chicks and several crows on island

Calculation of Total North Shore Nesting

<u>Group</u> Suzie	Site	Nest Cou 1989 19				
Juzic	12 13	34 36	29 26	$\left(\frac{207-158}{158}\right)$	+1	1515 =1985
	16	$\frac{137}{207}$	$\frac{103}{158}$	(100		
Blueber	с у 23	87	65	$\left(\frac{304-259}{259}\right)$	+1	614 = 721
	25	$\frac{217}{304}$	194 259	(200)	
Marr	31	268	223	$\left(\frac{268-223}{223}\right)$	+1	259 = 311
Grand Marais		73	62	$\left(\frac{107-82}{82}\right)$		133 = 178
	37	$\frac{34}{107}$	<u>20</u> 82	82	+1/	133 - 178
Lutsen	use Gi	rand Mara	is factor	$\left(\frac{107-82}{82}\right)$	+1	56 = 73
Taconit	e Harbor 48	376	393	$\left(\frac{1478-130}{1303}\right)$	03+1	1311 = 1487
	49	$\frac{1102}{1478}$	$\frac{910}{1303}$		/	
Illgen	City use S	ilver Bay	factor	$\left(\frac{324 - 234}{234}\right)$	+1)	66 = 91
Silver	Bay 64	58	49	$\left(\frac{324-234}{234}\right)$	+1	1899 = 2629
	70	$\frac{266}{324}$	185 234	101	, ,	
Split R	ock 77	142	136	$\left(\frac{142 - 136}{136}\right)$	+1)	303 = 316
Knife Island & Encampment $80 598 759 \left(\frac{598-759}{759}\right) 1582 = 1246$ Estimated Total North Shore Nests 9037						
200 2 W 100 110 gr 222	80	598	759	$\left(\frac{598-759}{759}\right)$	+1	1582 = 1246
		Estin	ated Total	North Shore Ne	sts	9037