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INVOLVEMENT OF THE U. S. FISH AND WILDLIFE SERVICE IN THE
NEW YORK STATE BALD EAGLE REINTRODUCTION PROJECT

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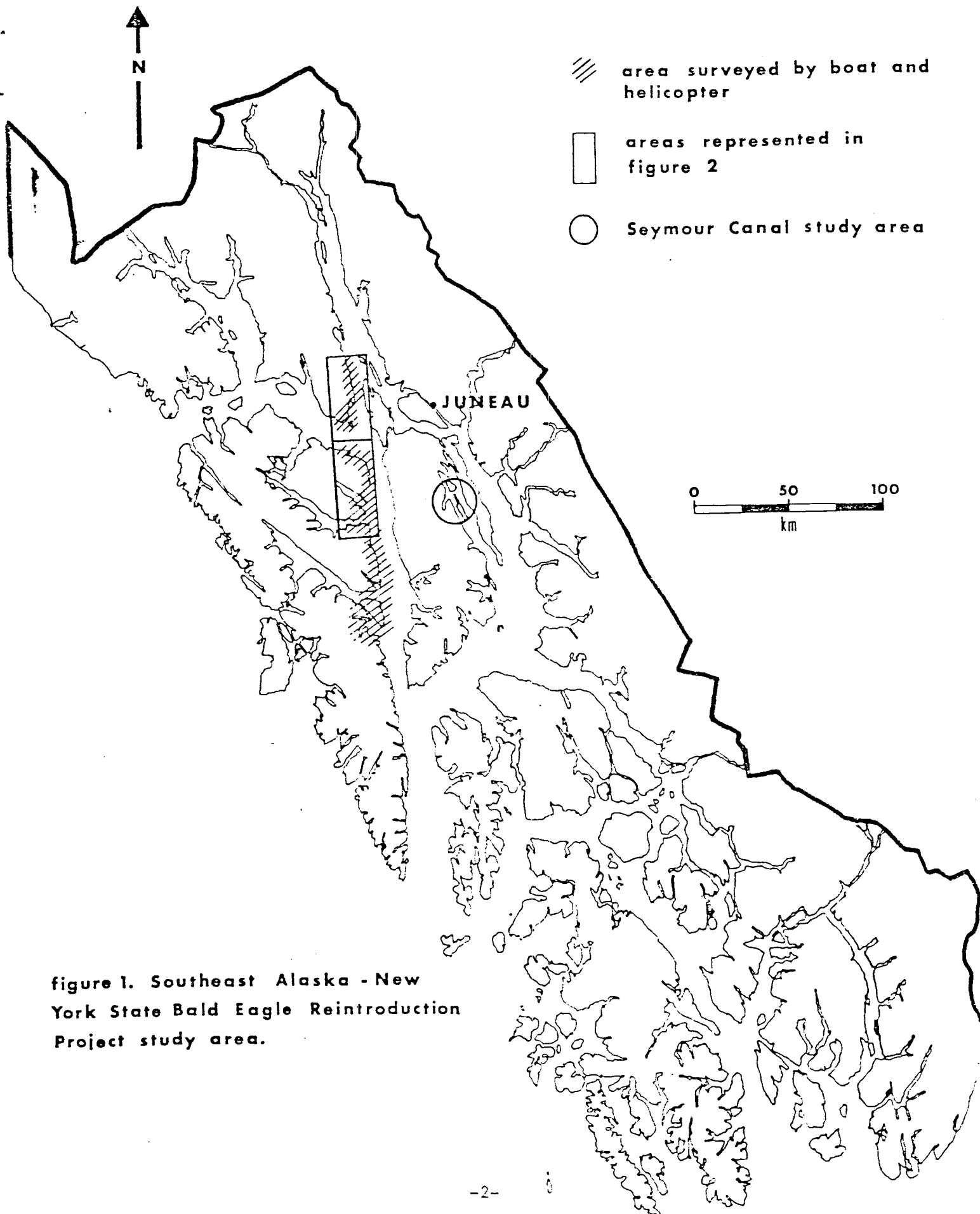
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In July 1981, Region Seven of the U. S. Fish and Wildlife Service issued the New York State Department of Environmental Conservation (DEC) a permit to take 21 young bald eagles from southeast Alaska and transport them to the State of New York. These eagles were to be released or hacked-out into historic bald eagle habitat in an effort to re-establish a viable nesting population in the State of New York. Because of anticipated logistical difficulties associated with a project of this nature, the Raptor Management Studies Project of the U. S. Fish and Wildlife Service in Juneau worked closely with the New York DEC and agreed to assist them with preliminary surveys and the actual capture of the eaglets. This involved the use of a Fish and Wildlife vessel and eagle management personnel for seven days from 14 July through 20 July. The State of New York Bald Eagle Reintroduction Project Environmental Assessment Report, prepared by the U. S. Fish and Wildlife Service, discussed this project as it relates to the biology and management of bald eagles in Alaska. The purpose of this report is to describe the implementation of this project, present bald eagle productivity data acquired during associated nest surveys, and document the actual nesting habitat affected.

Study Area

The area surveyed consists of approximately 347 kilometers of shoreline in the north-central part of southeast Alaska (figure 1). The shoreline habitat is typical old growth coastal forest of Sitka Spruce and western hemlock. Approximately 255 kilometers, or 73 percent, of the shoreline is adjacent to broad, inland saltwater channels with a predominately



eastern exposure. The remaining 92 kilometers occur in sheltered areas, such as bays and narrow inlets, with varying exposures.

Methods

Nests in the study area were located by boat during previous Fish and Wildlife Service surveys and their locations were marked on one-inch per mile quad maps. Aerial surveys were conducted by helicopter on July 7 and 9 to determine which of these nests were active and contained young. The approximate age and number of young in active nests was also recorded. Field operations were based from the Fish and Wildlife Service motor vessel, SURFBIRD, and two capture crews, consisting of two to three people each, were shuttled to shore by skiff. Nest trees were climbed using lineman's climbing spurs, ropes, and rappelling equipment. Once the climber reached the nest, the eaglet was placed in a nylon mesh sac and lowered to the ground. If two eaglets were removed from the same nest, they were lowered separately. Eaglets were then placed in wooden live boxes and transported by skiff to the M/V SURFBIRD. While on the boat, the birds were given a constant supply of fresh fish and their boxes were cleaned daily.

Nineteen of the 21 young bald eagles taken were removed from the study area in southeast Alaska. On July 20, these birds, along with the New York State biologists, were transported by sea plane from Eliza Harbor on Admiralty Island to Juneau, where they met a connecting private charter to New York.

The 2 remaining eaglets required for a total of 21 birds were taken

from Cook Inlet near Anchorage. Fish and Wildlife Service Law Enforcement personnel from Anchorage collected them from the beach after their nest tree had blown down. These birds were flown commercially to Juneau on July 20 to meet with the private charter to New York. All birds were immediately transferred to a hacking tower upon arrival in New York.

Results

The extensive helicopter surveys required for this project provided good bald eagle productivity data. A total of 271 nests were surveyed of which 40, or 15 percent, were active. 34 nests contained one young, six nests contained two young. The mean number of young per active nest was 1.15. The most comparable productivity data gathered in southeast Alaska in 1981 are from an ongoing productivity study in Seymour Canal on Admiralty Island (figure 1). There, in June 1981, a total of 88 nests were surveyed of which 20, or 23 percent, were active with a mean of 1.25 young per active nest. Annual productivity surveys in Seymour Canal from 1972-1981 show a mean activity rate of 29 percent with 1.56 eggs or young per active nest. This difference in activity rates between the New York reintroduction project study area and Seymour Canal is indicative of substantial regional variation in southeast Alaska bald eagle production.

This variation can be further exemplified within the reintroduction project study area if the exposed and sheltered shoreline areas are divided and activity rates calculated separately. Approximately 216, or 80 percent, of the nests surveyed occurred on exposed shorelines; of these,

37 nests, or 17 percent, contained young with a mean of 1.16 young per nest. The remaining 55 nests occurred at the southern end of the study area in Kelp Bay, a deep, sheltered bay with three main arms and two major islands. There, only three nests, representing 5 percent of those surveyed in the bay, were found to be active; each contained one young. No cause for this marked regional variation in productivity has been established at this time. But, the evidence does suggest that bald eagle productivity data from restricted areas can, at best, be used only as an index of productivity in southeast Alaska.

Figures 1 and 2 show the portion of the study area affected by removing eaglets and the actual locations of nests surveyed. All active nests were given a reference number. These numbers correspond to the numbers in table 1, where capture data is summarized. Eaglets were taken from consecutive active nests beginning at the northern boundary of the study area until a total of 19 birds had been collected. In this way the total area impacted was minimal, allowing followup productivity studies to be based on a regional, rather than a nest by nest, basis. Four nests containing young were bypassed, however, for various reasons.

Collection of the young eagles went as planned; no difficulties were encountered. Between the two climbing crews, an average of 4-6 trees could be climbed daily, variation depending upon weather, distance between nests, and difficulty of the trees climbed. The eaglets exhibited no signs of overstress throughout the entire operation and adapted well to their liveboxes and life aboard the boat.

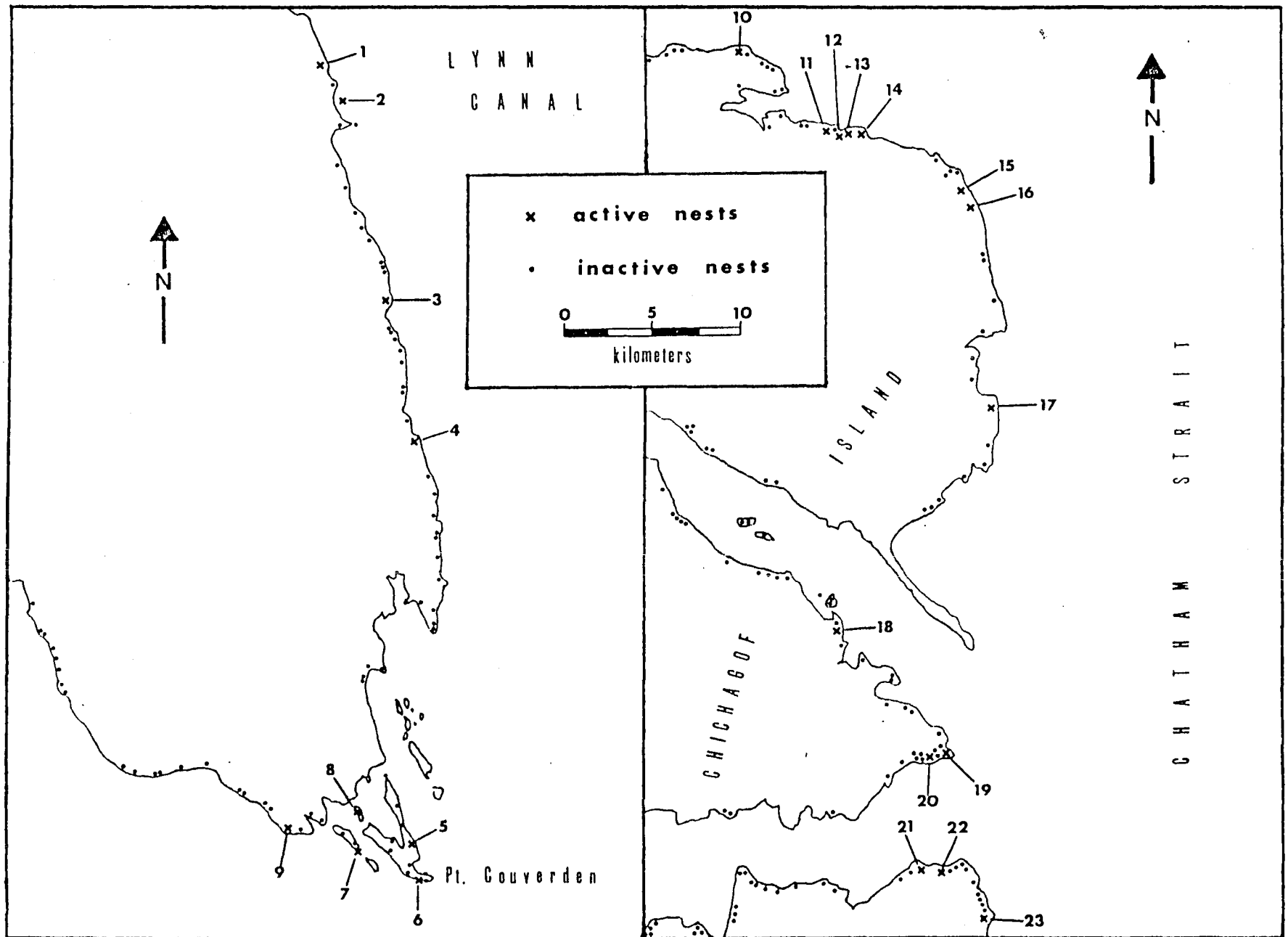


figure 2. Active and inactive nest locations in affected study area.

TABLE 1: referenced active bald eagle nests and how they were affected.

<u>Nest No.</u>	<u>No. Young in Nest</u>	<u>Action Taken</u>	<u>Date</u>
1	1	eaglet removed	7/14/81
2	1	eaglet removed	7/14/81
3	1	eaglet removed	7/15/81
4	2	both eaglets removed	7/15/81
5	2	none: could not locate nest from ground	7/15/81
6	1	eaglet removed	7/15/81
7	1	eaglet removed	7/15/81
8	1	eaglet removed	7/15/81
9	1	eaglet removed	7/15/81
10	1	eaglet removed	7/16/81
11	2	both eaglets removed	7/16/81
12	1	eaglet removed	7/16/81
13	2	one eaglet removed, one eaglet banded and left in nest (band #629-11404)	7/16/81
14	1	eaglet removed	7/16/81
15	1	eaglet removed	7/17/81
16	1	eaglet removed	7/17/81
17	1	none: rough sea conditions	7/17/81
18	1	none: rough sea conditions	7/17/81
19	1	eaglet removed	7/17/81
20	1	eaglet removed	7/17/81
21	1	none: tree not climbable	7/17/81
22	2	both eaglets banded and left in nest (band #'s 629-11401 and 629-11402)	7/17/81
23	1	none: collecting completed	7/17/81