# PROGRESS REPORT

# VERMILION BURN AVIAN STUDY

MAY, 1975

by

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During the month of May, the bird survey in Vermilion Pass continued as in 1973. Every effort is being made to improve upon the methods employed in 1973, while at the same time using similar techniques so that the data for the two studies will be comparable.

Work commenced on May 16th, after arriving in camp the previous day. The first three days were spent reviewing literature and locating lines for census plots that are to be set up in the vicinity of the old plots four and five. The new plots are for the purpose of gathering quantitative data from the two types of pristine forest that occur in the Pass. The plots will be about ten hectares in size, in accordance with international standards. The plots will actually consist of six parallel lines fifty metres apart.

Since the majority of tapes marking the 1973 plots were taken down, a large part of my time was spent in re-measuring lines and attempting to relocate them in exactly the same positions as they were last time. Of plots one to three, only plot three has not yet been re-surveyed. This is partly due to inaccessibility due to snow, and partly due to the large amount of time that was used to re-survey plots one and two, and in starting two new census plots. I expect that plot three can be laid out again by June 10th.

Another innovation in the study is the use of "nocturnal surveys". It

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was my feeling that the 1973 survey made no attempt to cover any nocturnal species that might occur in the burn; namely owls and goatsuckers. It is for this reason that I have begun the "nocturnal surveys". It is my hope that they will help render more complete the avian list for Vermilion Pass. The procedure I use in these surveys is quite simple: the observer makes observation stops, at random, in the various habitats he wishes to survey. At each stop, recordings of nocturnal birds are played. These playbacks induce any birds in the area to start calling. Thus, the presence or absence of responses indicates the presence or absence of birds in the area. The number of responses can also give a general idea of bird density. These surveys have been quite productive so far. One new species, the Boreal Owl, *Aegalius funereus*, has been contacted on four different occasions in two different locations.

Visit maps are again being used, but have been revised. This year's maps are enlarged and are more accurate, owing to the fact that they were drafted from aerial photographs. These improved maps will make determining the territorial boundaries of pairs of birds much simpler.

One specimen of a White-crowned Sparrow, *Zonotrichia leucophrys*, has been secured. The bird in question was found along the roadside at Eisenhower Junction, and had been hit by a car. It will be skinned and stuffed, then examined for subspecific determination.

So far, one nest has been found. On May 27th, I found a Dark-eyed Junco nest, *Junco hyemalis oreganus*, on line three in plot one. I will continue searching for nests throughout the breeding season.

This May, a total of 42 species have been contacted, five of which were not recorded in 1973. These new species are:

1. Blue-winged Teal, *Anas discors*.
2. American Wigeon, *Anas americana*.
3. Ring-necked Duck, *Aythya collaris*.
4. Golden Eagle, *Aquila chrysaetos*.
5. Boreal Owl, *Aegalius funereus*.

Table 1 summarizes the distribution of field work for the month of May, 1975. Nocturnal surveys lasted from two to three and a half hours, morning and evening visits lasted from two to three hours, and casual visits from four to seven hours. The casual visits were for the purpose of re-setting lines in the census plots.

TABLE 1. Distribution of Field Work - May, 1975.

| Plot or Transect | Morning Visits | Evening Visits | "Casual Visits" | Nocturnal Surveys | Total Visits |
|---|---|---|---|---|---|
| Plot 1 (P1-1) | 1 | - | 4 | - | 5 |
| Plot 2 (P1-2) | - | - | 2 | - | 2 |
| Plot 3 (P1-3) | - | - | - | - | - |
| Plot 4 (P1-4) | - | - | 2 | 1 | 3 |
| Plot 5 (P1-5) | - | - | 3 | 1 | 4 |
| Transect 3 (TR-3) | 1 | 2 | 1 | 3 | 7 |
| Transect 4 (Tr-4) | 2 | 1 | 1 | 5 | 9 |
| Total | 4 | 3 | 13 | 10 | 30 |