

KOOTENAY NATIONAL PARK  
P.O. BOX 220  
RADIUM HOT SPRINGS, B.C.

VERMILION PASS BURN AVIAN STUDY

June, 1975

Monthly Progress Report

by

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The month of June saw the establishment of two new census plots. Their purpose will be to gather quantitative data on bird populations in the two types of pristine forest areas that occur in Vermilion Pass, - successional and climax.

Plot Four (PL-4) is located in the climax spruce-fir forest in Kootenay National Park. The plot is very close to, and, in fact, contains portions of Plot Four, as used in 1973. Because of the thickness of the bush, the plot is roughly half the size of the similar plots in the Burn. The new PL-4 has been constructed to conform with international standards. It consists of six 300 metre lines running parallel and 50 metres apart from one another. The resulting square-shaped plot encloses roughly 10 hectares of spruce-fir forest, 100 metres from the nearest burned area.

Plot Five (PL-5) has been constructed in the same manner as PL-4, and is located in the successional forest near the Storm Mountain Lodge. This new census plot incorporates Plot 5 of the 1973 survey. Again, for convenience, the new plot is half the size of those in the Burn.

Considerable time during the first 2 weeks of June was devoted to "laying in" the two new plots and mapping them. Maps of the new plots, and upgraded maps of the 1973 plots, are included in this report.

Table I, below, summarizes the distribution of censusing visits to plots during June.

Plot or Transect	TR-3	TR-4	PL-1	PL-2	PL-3	PL-4	PL-5	TOTAL
Morning Visits	2	0	1	1	1	1	1	7
Evening Visits	1	2	1	1	0	1	1	7
Totals	3	2	2	2	1	2	2	14

Table I. Morning vs. Evening Surveys

An additional two owl surveys were conducted, one of which resulted in the discovery of a Boreal Owl (*Aegolius funereus*) in the lodgepole pine forest near Plot Five.

Although a rainy June did hamper field work, many valuable observations were made. In addition to further observations on a Junco nest, in PL-1, I noted 2 locations where ravens (*Corvus corax*) were nesting on cliff faces. One nest is located on the northeast face of Stanley Peak, while the other is on a cliff face near Storm Mountain. Other species of birds appear to be well established on distinct territories, and Yellow-rumped Warblers (*Dendroica coronata*) have already been seen carrying food, a good indication of young being nearby. I noted 2 song types in

Townsend's Warblers, and am currently working out the distribution of daytime singing for several species..

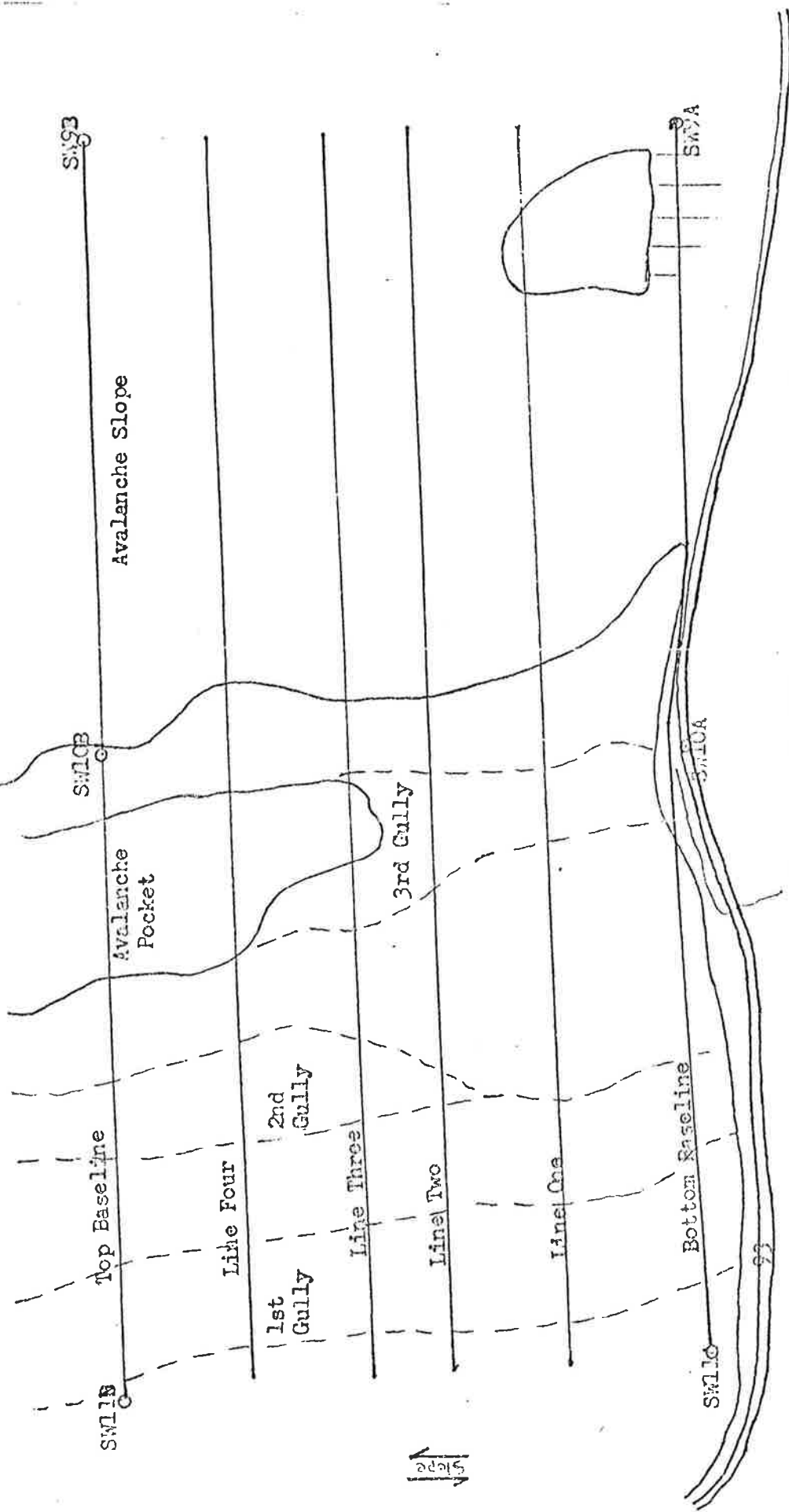
In addition to gathering data on resident species, and noting behaviour, the maps of all plots have been upgraded this month and lines in the plots themselves have been straightened and marked more adequately.

In the month of June, I recorded 6 new species for the Vermilion Pass. They are:-

- |                                 |                        |
|---------------------------------|------------------------|
| (1) <i>Butorides virescens</i>  | (Green Heron).         |
| (2) <i>Mergus merganser</i>     | (Common Merganser)     |
| (3) <i>Porzana carolina</i>     | (Sora)                 |
| (4) <i>Charadrius vociferus</i> | (Killdeer)             |
| (5) <i>Empidonax hammondi</i>   | (Hammond's Flycatcher) |
| (6) <i>Empidonax difficilis</i> | (Western Flycatcher)   |

All of the above with the possible exceptions of numbers 5 and 6 are probably migrants. The Green Heron is a particularly interesting observation, since it has not previously been recorded in Alberta. The Heron I saw was noted at Vista Lake, on the evening of June 5, 1975. I searched, in vain, the following day, in order to obtain a photograph of the heron. A complete description of the bird, along with behavioral notes, will be sent to the Alberta Ornithological Records Committee.

It is hoped that with the addition of an assistant in July, more time can be devoted to searching for nests, and using recorded calls to aid in photographing a few species.



Legend

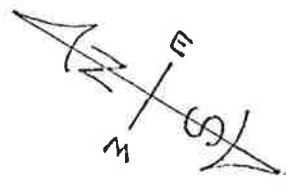
- Plot line
- Survey pin (labelled)
- Gully
- Boundary: undisturbed burn
- Unburned pocket
- Road
- Stream

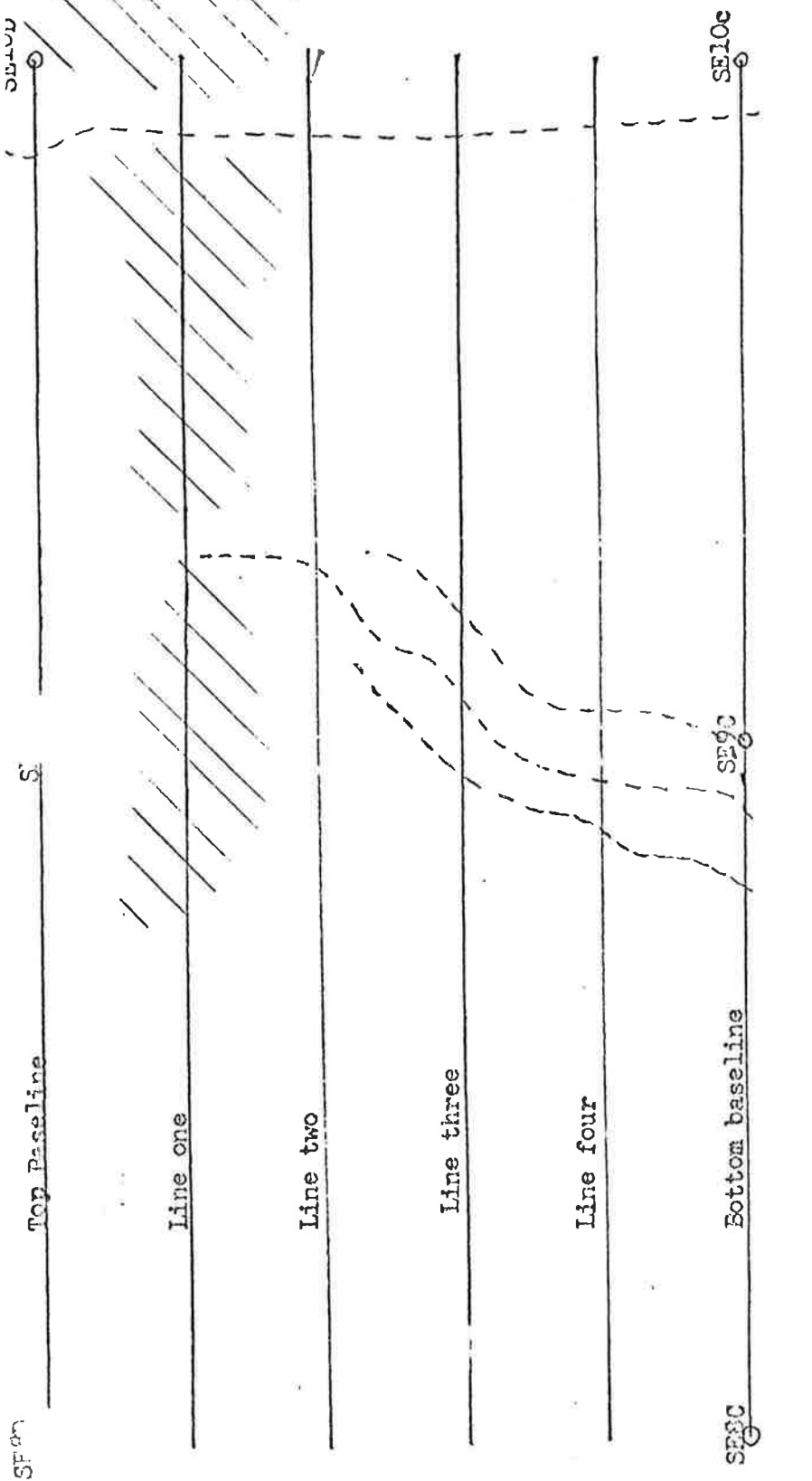
Plot One (PL-1)  
 Vermillion Pass Avian Study  
 1975

Scale  
 Metres



1 centimetre = 30 metres

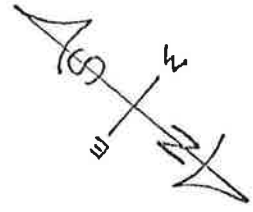
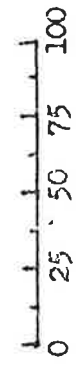




Plot Two (PL-2)  
 Vermillion Pass Avian Study  
 1975

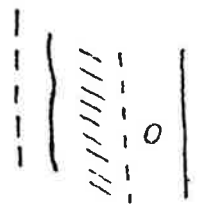
Scale  
 Metres

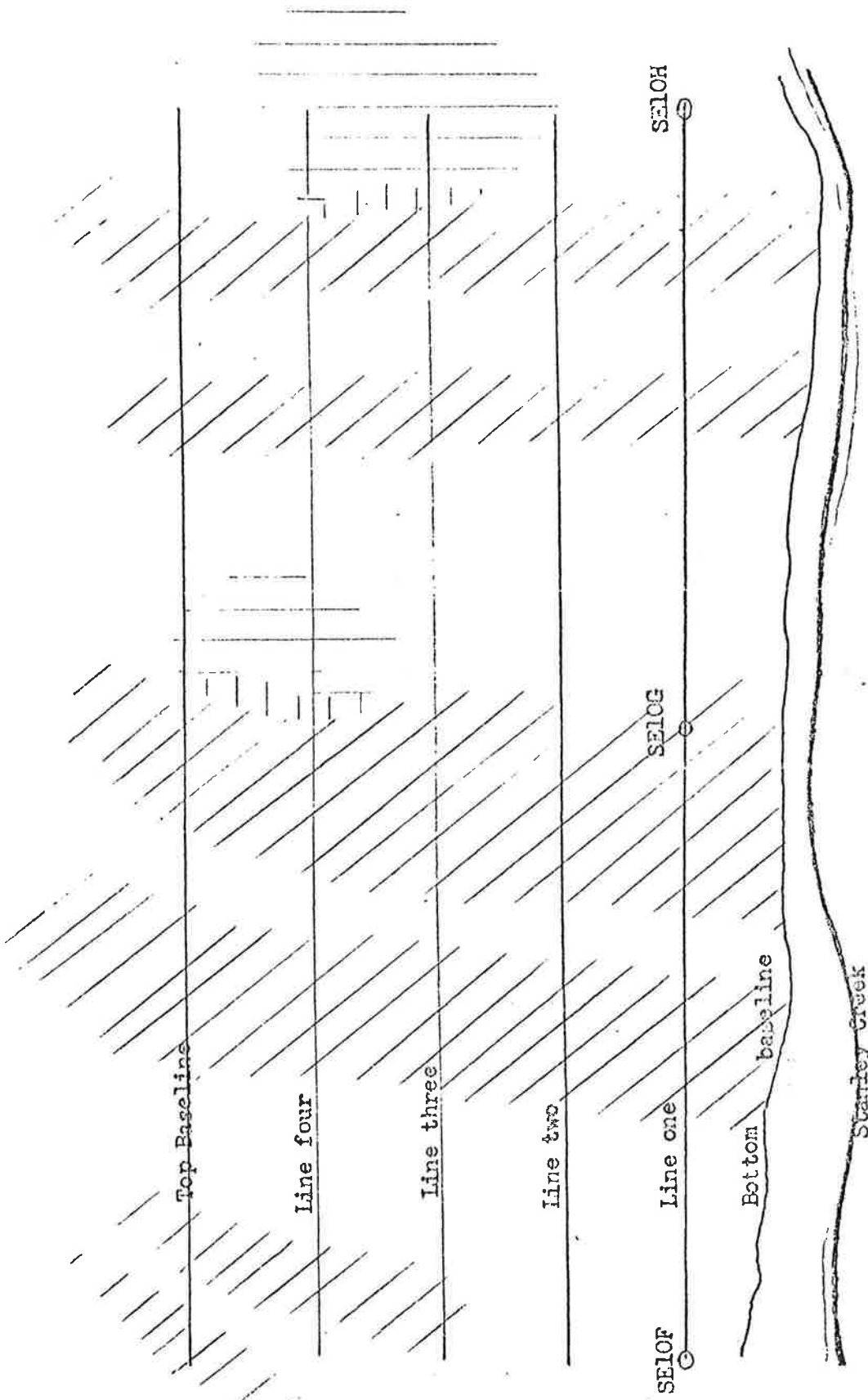
1 centimetre - 25 metres



Legend

- intermittent stream
- stream
- unburned pocket
- ridge
- survey pin
- plot line





Plot three (PL-3)  
 Vermillion Pass Avian Study  
 1975

Scale  
 Metres



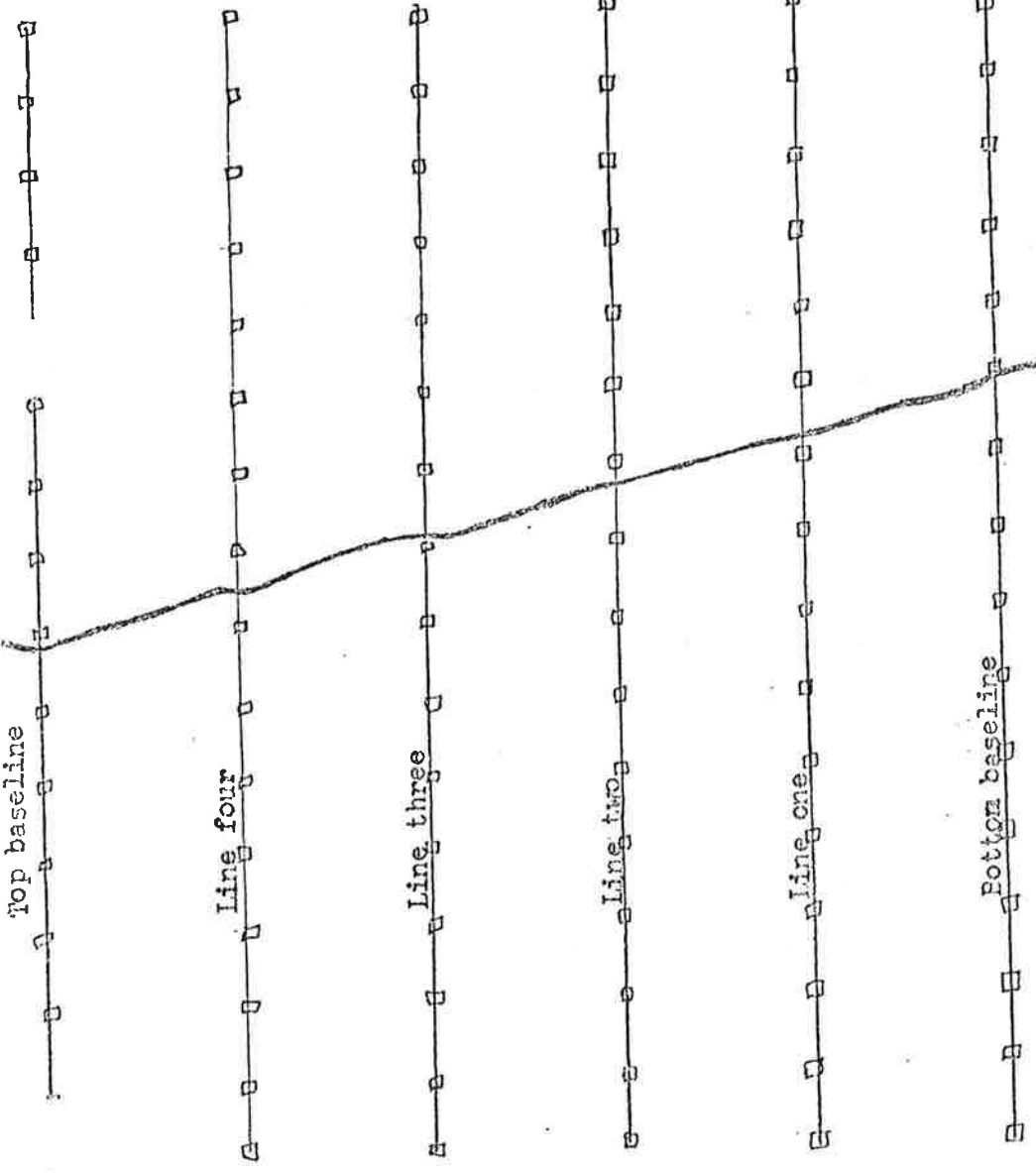
1 centimetre = 30 metres

Legend

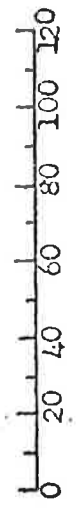
- unburned whitebark pine
- unburned pocket
- avalanche slope
- pristine forest boundary
- creek
- survey pin
- plot line



Plot Four (PL-)  
 Vermillion Pass Avian Study  
 1975









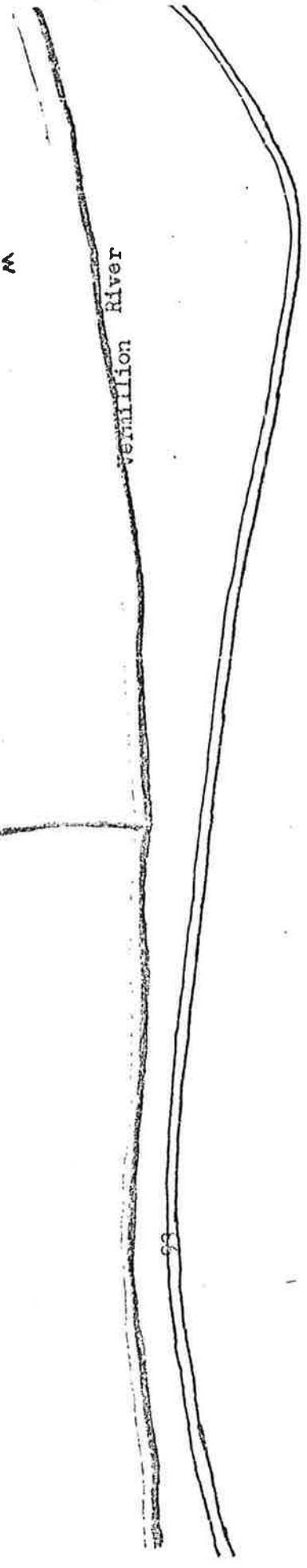
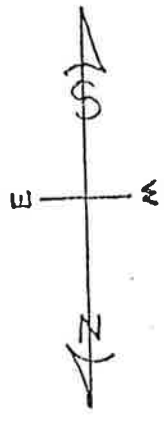
Scale  
 Metres

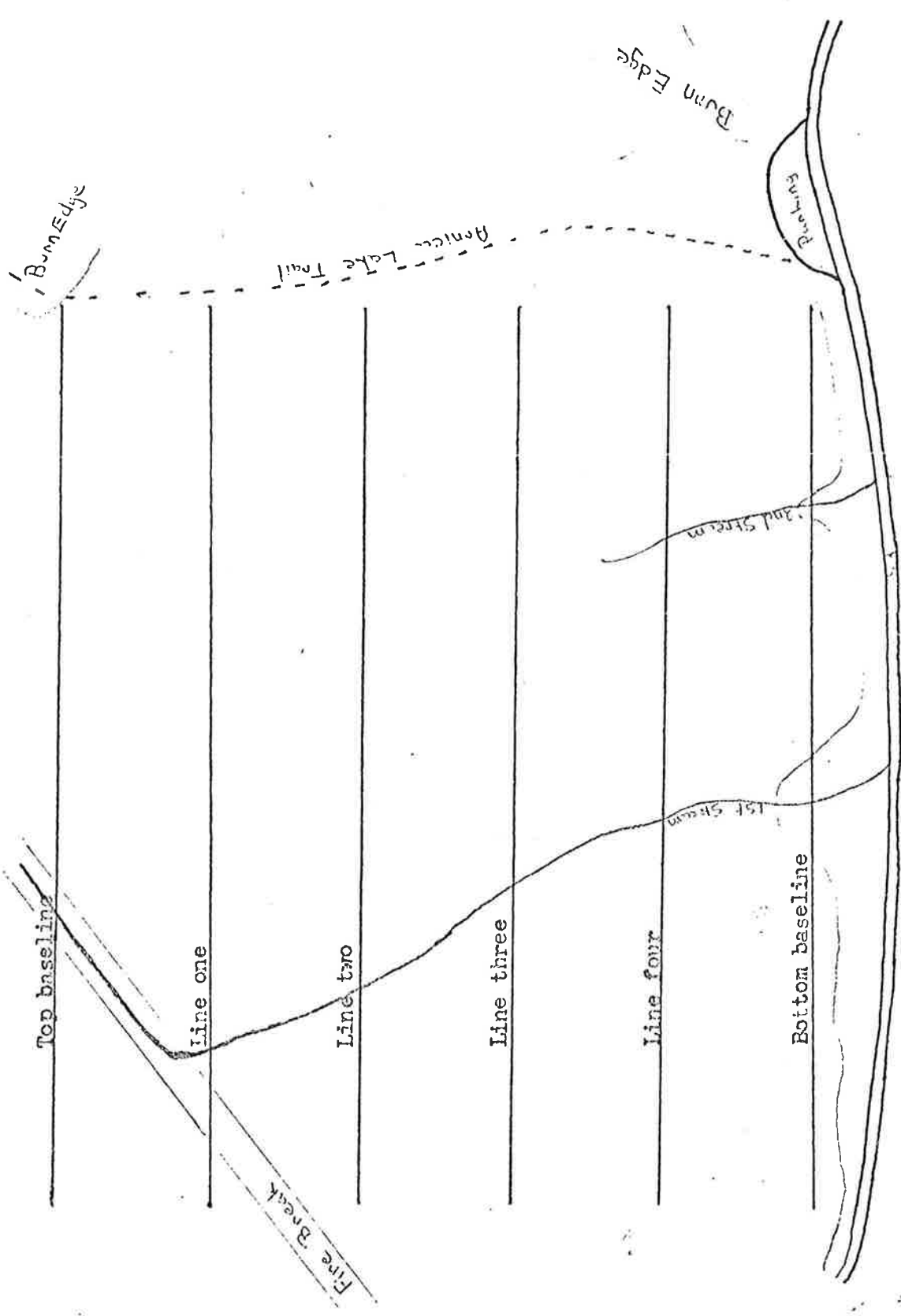


1 centimetre - 20 metres

Legend

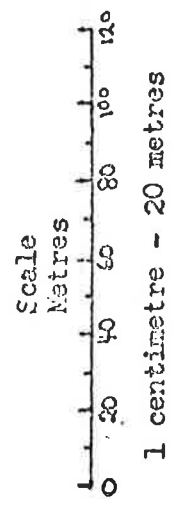
- Pristine forest boundary 
- Creek 
- Road 
- Survey pin 
- Plot line 
- 20 metre marker tapes 



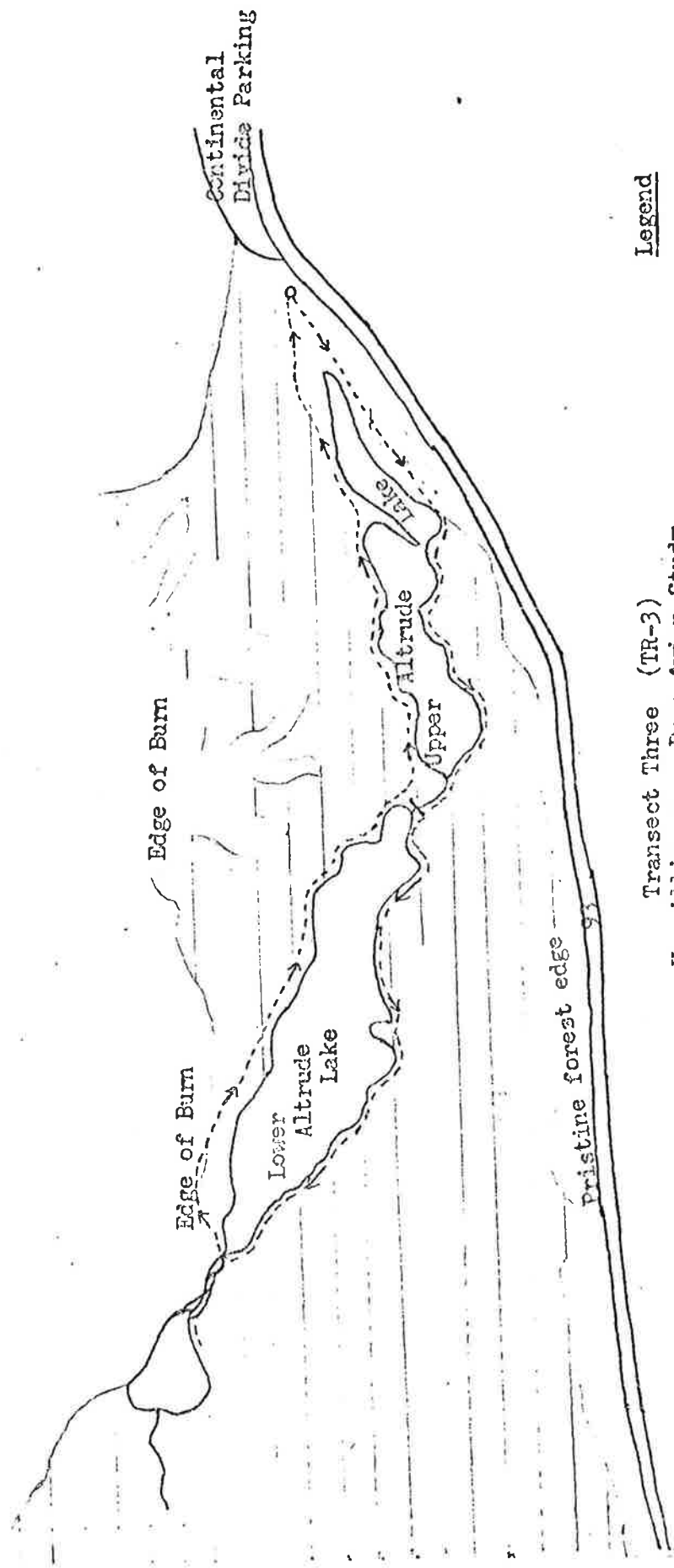
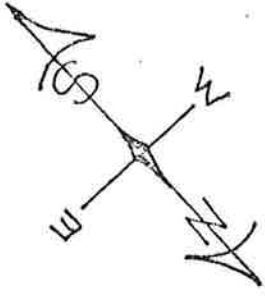


- Legend
- Pristine forest edge
  - - - Trail
  - ||| Road
  - ~ Stream
  - Plot Line marker
  - 20 metre marker

Plot Five (PL-5)  
 Vermillion Pass Avian Study  
 1975







Transect Three (TR-3)  
 Vermillion pass Burn Avian Study

Scale  
 1 centimetre = 60 metres  
 0 60 120 180

Legend

- pristine forest [dotted line]
- road [solid line]
- creek [wavy line]
- fall (s) [vertical lines]
- lake [irregular shape]

transsect route [dashed line with arrow]  
 (direction of travel indicated)

