

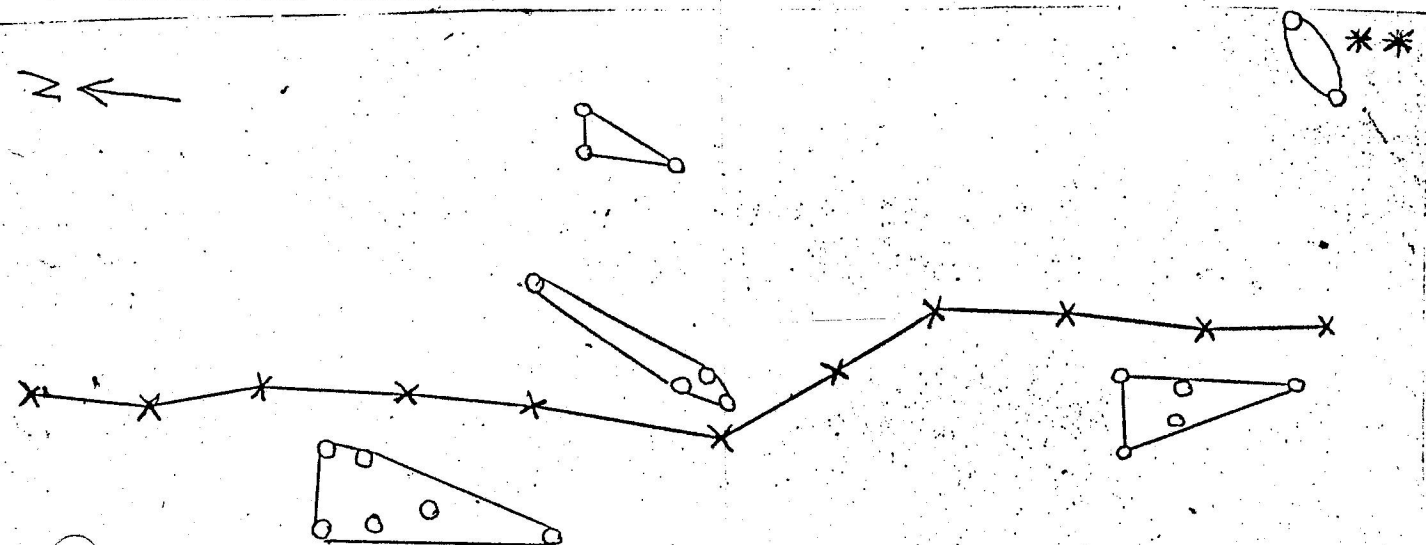
Appendix 1. Aerial photograph overlays (or summaries of Hoot Count Data Forms when photographs were not available) used to determine the number of grouse territories in hooting groups at each hoot count transect. Where Hoot Count Data Forms were used the accuracy of scale and proportions is poor.

O = hoot tree, X = listening post, X-----X = transect route, O-----O = minimum territory boundary.

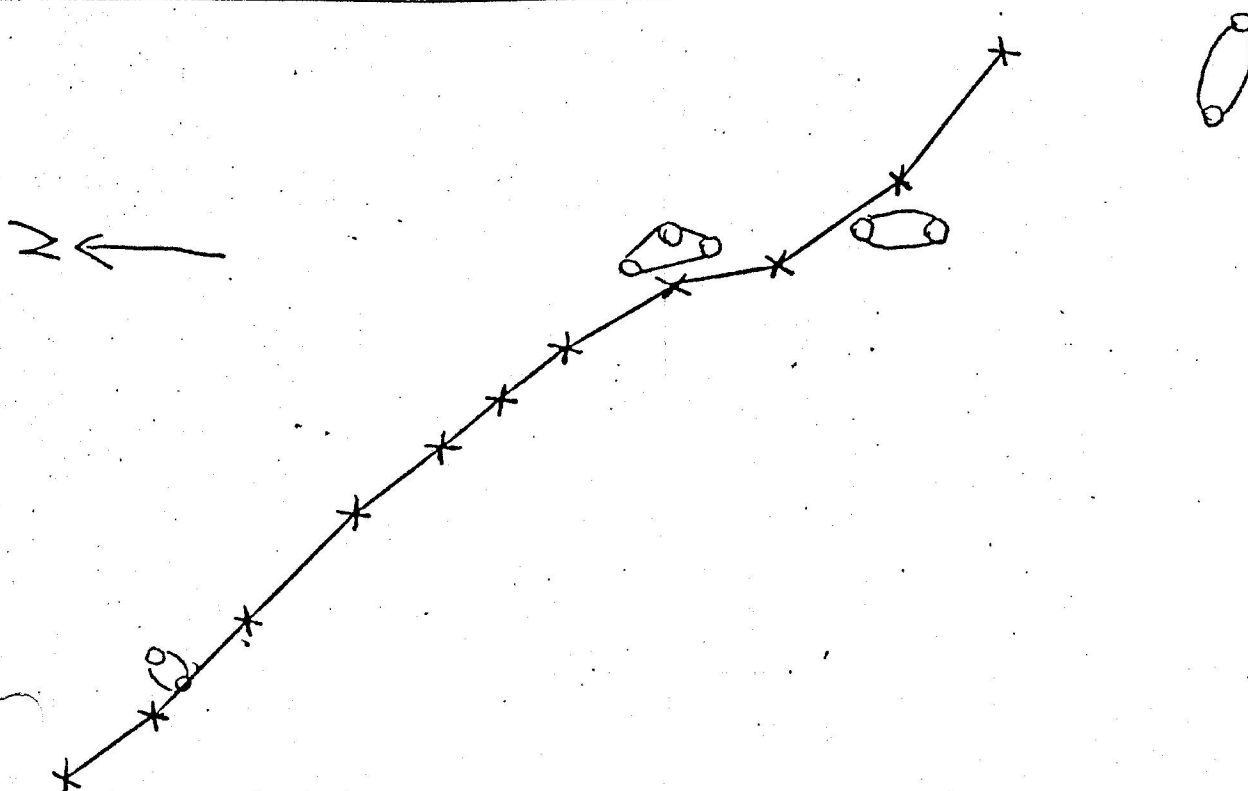
Scale: X-----X = ca. 100m

APO = aerial photograph overlay, HCDF = hoot count data form

RAKER PEAK TRANSECT (from APO)

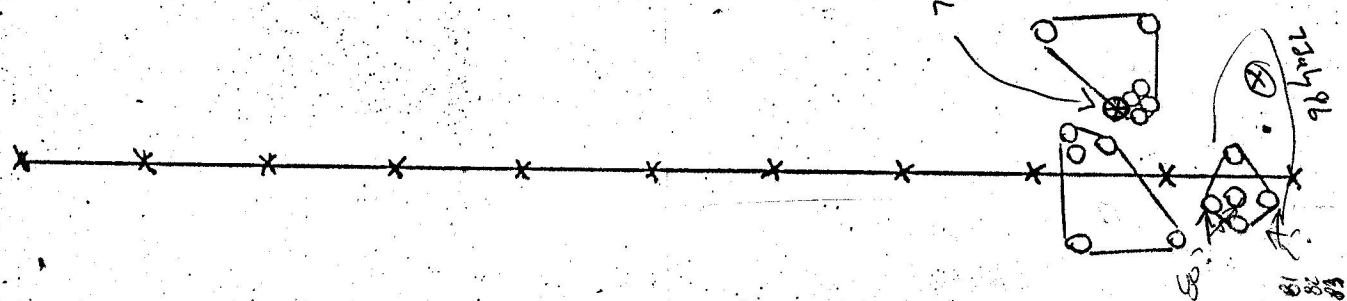


WARNER RIDGE TRANSECT (from APO)

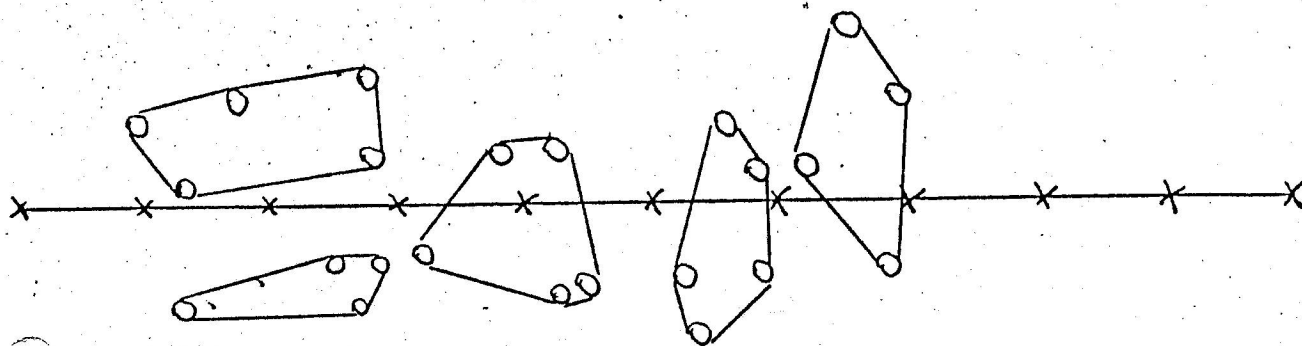
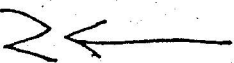


* * Partly-eaten carcass of this grouse discovered on 3rd run.

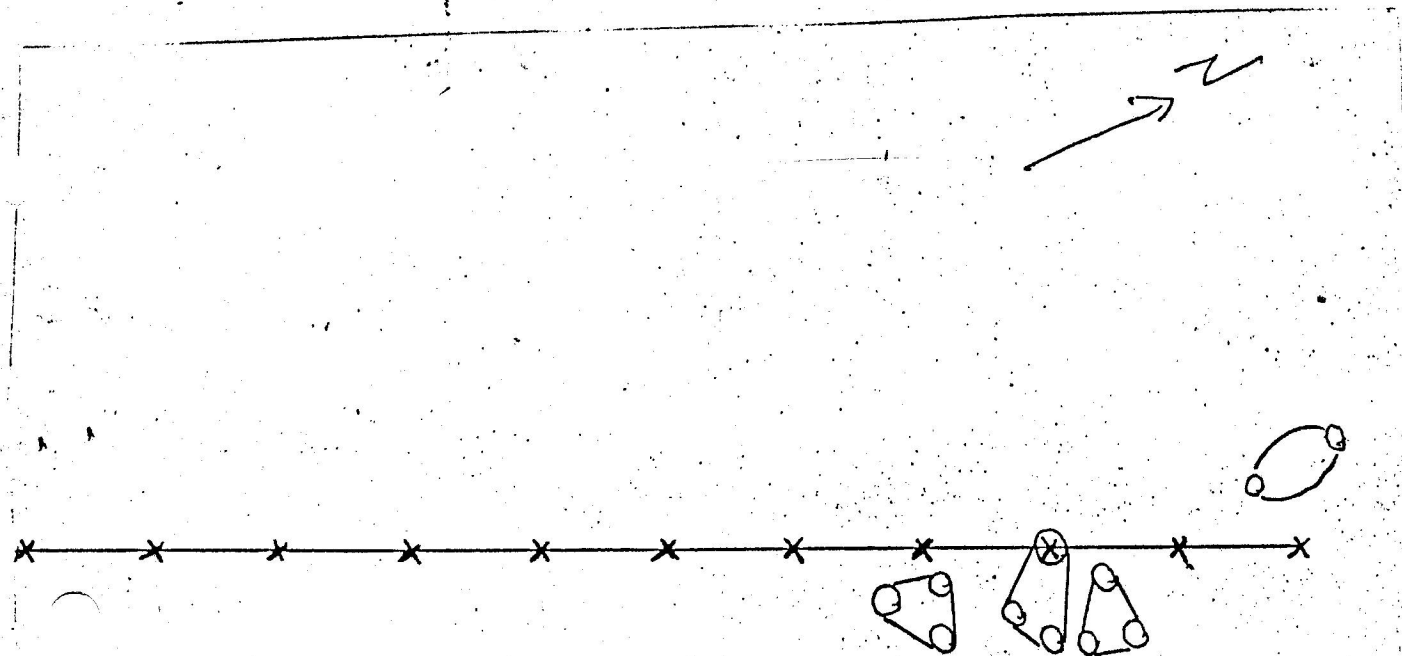
YOSEMITE TRANSECT (from HCDFs)



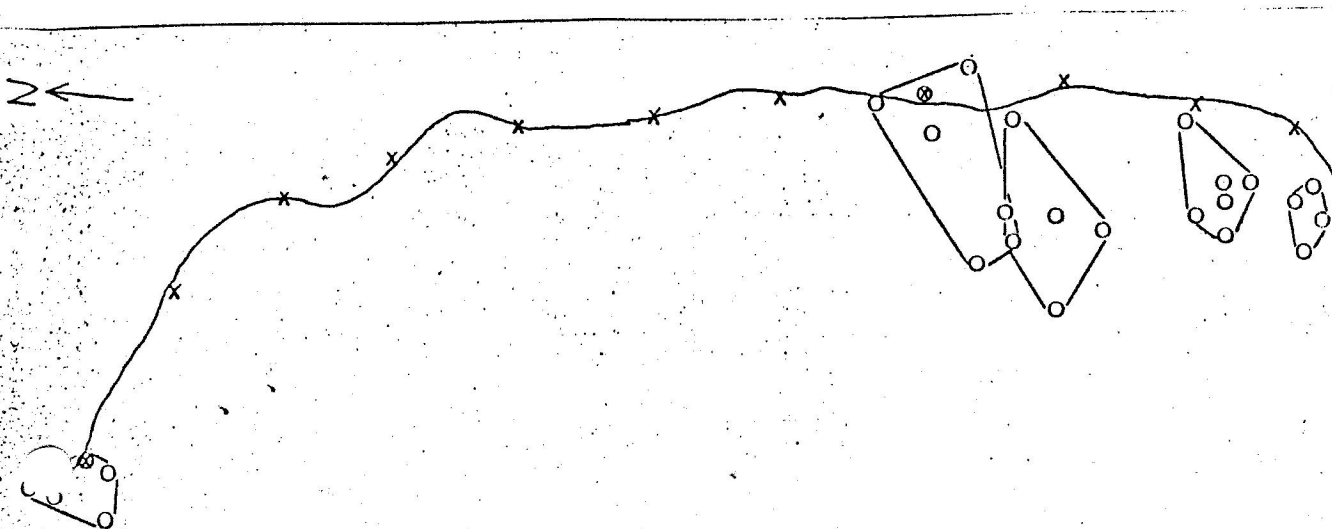
QUARTZ MOUNTAIN TRANSECT (from HCDFs)



STONY CREEK TRANSECT (from HCDFs)



BIG BALDY TRANSECT (from APO)



APPENDIX 2. Habitat parameters measured at grouse territories.

SITE: Location of 1km hoot count transect, 3 in National Forests ('managed forests') and 3 in National Parks ('unmanaged forests').

TERRITORY: Identification number for each hooting male (territory) along 1km transects.

DIRECTION: Compass direction that data-collection 'radians' projected from territory center. Had little biological relevance, but helped to keep data organized.

ASPECT: Compass direction that slopes faced, measured at 100m VPCs only (4 measured/territory). Some 100m points fell on 'crests.'

SLOPE UP: Degrees of slope above each VPC.

SLOPE DOWN: Degrees of slope below each VPC.

FIRE: Presence (1) or absence (0) of fire scars or burned wood anywhere within territory.

DISTANCE: Distance of VPCs from territory center. Had little biological relevance, but aided data organization and systematic sampling.

IN OR OUT of known territories: Whether VPCs fell within (1) or outside (0) 'minimum known grouse territories.'

STUMPS: Presence (1) or absence (0) of cut stumps within a 20m x 40m area around VPCs. Was an indication of past timber harvest.

CANOPY COVER: Percent 'openness,' as measured with 4 samples from a spherical densiometer at each VPC.

DAUBENMIRE COVER CLASSES FOR SHRUBS, HERBS AND GRASSES: At each VPC measures were taken from 4 50cm x 20cm (0.1 m²) Daubenmire frames. Frames were placed 1m from VPCs, each in a different cardinal compass direction. Cover values for the items listed below were estimated according to Daubenmire's (1959) cover class categories: 1=<5%, 2=5-25%, 3=25-50%, 4=50-75%, 5=75-95%, 6=>95%.

LITTER: Forest litter: leaves (duff), not bare ground, gravel, rocks or boulders.

GRASSES AND SEDGES: All species of grasses and sedges combined (sedges were uncommon).

HERBS: All species of non-woody plants combined (excluding grasses).

SHRUBS: Genera or species of woody shrubs plus tree seedlings <1.5cm DBH.

POINT-CENTERED QUARTER MEASURES: At each VPC, the species, distance, and DBH of the closest tree in each of 4 quadrats was recorded.