

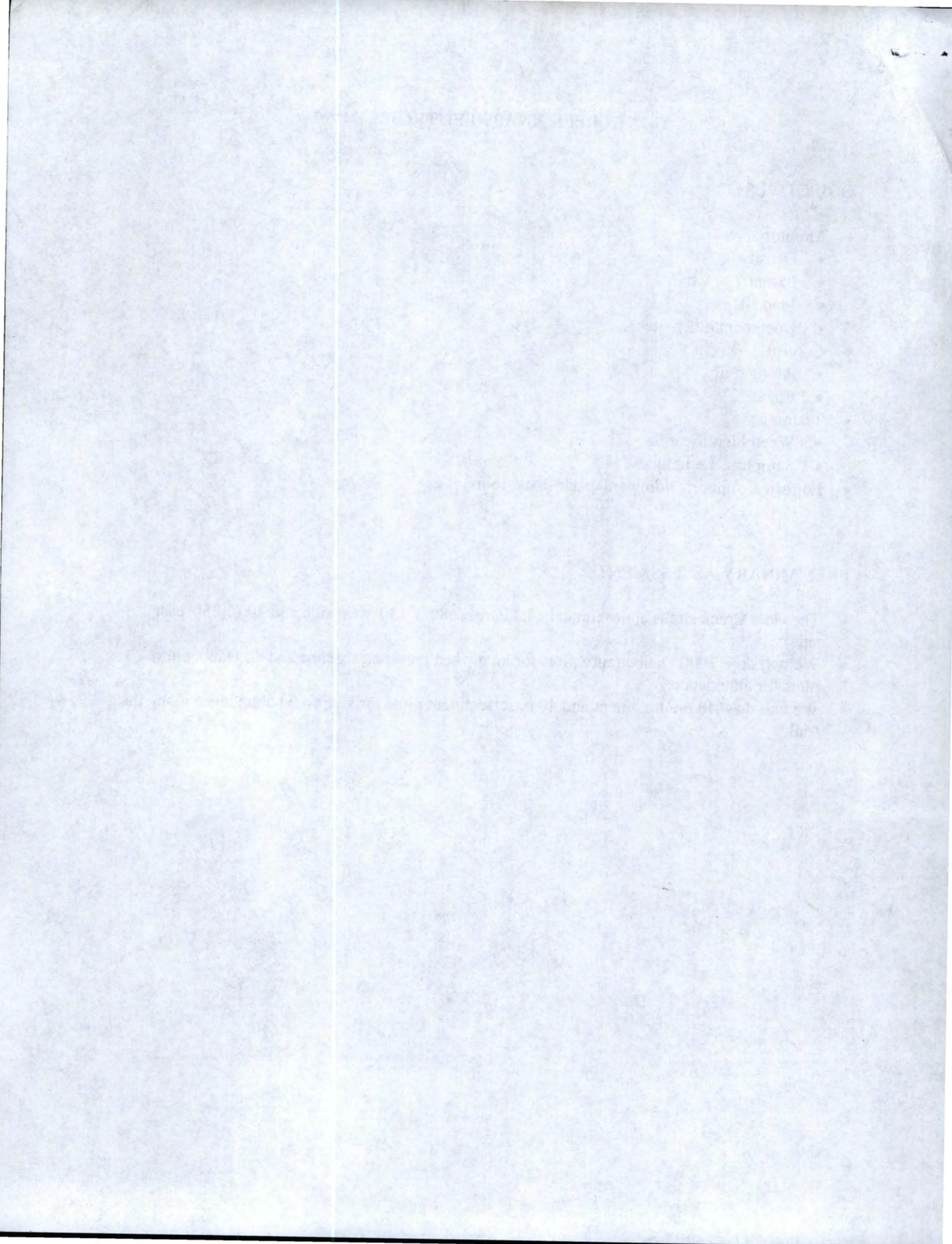
GOAT CREEK KNAPWEED PROJECT 1999

OBJECTIVES

- Monitor
 - Density
 - Extent
 - Map site
 - Document other sites
- Control
 - Along trail
 - Edges
- Training
 - Weed Identification
 - Sampling Techniques
- Logistical support (riding and pack stock, tools)

PRELIMINARY ASSESSMENT

- The Goat Creek site is approximately 4.7 acres (680' x 130' west side and 300' x 350' east side).
- We will do ~ 1000 Daubenmire plots for knapweed presence/absence and 80 Daubenmire plots for abundance.
- We will do ~ 40 pre treatment and 40 post treatment plots for knapweed abundance along the trail.



METHODS

Knapweed Extent

- Map transects 6 meters apart. Check Daubenmire plots every 3 meters along transects to document presence or absence of knapweed. End transects at topographic change or 2 plots without knapweed present. Map legend: O = presence, X = absence, T = topographic change. Use a colored pencil to mark every 12th plot.
- Mark on map additional extent of knapweed not picked up by plots.
- Map vegetation changes
- Equipment: 3 tape measures, 2 sighting compasses, (GPS unit), (aerial photos), graph paper, color pencils, plot pins & flagging, Daubenmire plot rings, data forms for transects.

Knapweed Density

- The total number of knapweed plants will be counted within randomly located Daubenmire plots. One plot will be counted for each 12 plots checked for presence or absence.
- Use your watch second hand to "randomly" select a number between 1 and 12.
- Count knapweed plants in that plot and record the number on the map site and data form.
- After finishing the presence/absence plots in the set of 12, select another random number for the next counted plot.
- Equipment: watch, data form.

Pulling Knapweed

- Always wear gloves. Knapweeds may be carcinogenic.
- The entire root should be removed if possible.
- Use a garden digging tool or long screwdriver to work large roots loose before pulling.
- Smaller plants may be removed with a trowel, hoe, or scraper.
- Put large knapweed plants in a grain bag for disposal, especially if they have seedheads.

Knapweed Control along Trail

- Start on the north side of the trail, west of Goat Creek
- Mark a border 2 meters from the center of the trail with string.
- Count knapweed plants in "pretreatment" plots every 12 meters along the trail. Select random distances from the trail (1/3m, 2/3m, 1m, 1 1/3m) with your watch.
- Pull and remove all knapweed plants within 2 meters of the trail.
- Count knapweed plants in "post treatment" plots every 12 meters along the trail, at random distances from the trail. Do not try to match these plot locations with pretreatment plots.
- Control knapweed by pulling on west and east sides of the Goat Creek knapweed site after the trail has been worked.
- Equipment: gloves, digging and scraping tools, Daubenmire plot rings, tape measures & string, grain bags, data forms.

Noxious Weed Survey along Big Creek Trail

- Search for noxious weed sites along Big Creek
- Document sites on data form and measure size of infestation.