Wildlife and Habitat Surveys for the South Fork American River Watershed Cohesive Fire

Strategy

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Acknowledgement

Executive Summary

The internship involved collecting data and implementing survey and habitat restoration work in association with the South Fork American River Watershed Cohesive Fire Strategy Project, Eldorado National Forest. The various projects I worked on throughout the internship include Northern Goshawk (NOGO) surveys, California Spotted Owl (STOC) surveys, Off Highway Motor Vehicle (OHV) trail monitoring/ species monitoring, NABat monitoring pilot project, and Bald Eagle surveys. Goshawk surveys consisted of using a kekker to broadcast for the goshawk and collecting data. The main goal for the goshawk survey is to find the goshawk and its nest. While surveying for goshawk we usually document anything that comes across our survey. We take about 6 minutes for each call point. For the spotted owls we use our voices to call them, we do two different types of calls. It usually takes about 10 minutes for each call point to be complete. We also work on the NABat project, we went into the field and left the acoustics in the same place as last year. We leave the acoustics out for the week to get a much bat detections as possible. For my individual project I focused on OHV species monitoring for Goshawk. While working on these PACs, I trained some of the other interns since I was very familiar with OHV, because I was here last year and it was my project. My skills from last year were better as I kept working on them day by day throughout the internship.

Project Objectives

Prior to a timber sale or fuels reduction project where suitable habitat for northern goshawks (*Accipiter gentiles*) occur, surveys for the species needs to be conducted. The survey needs to be completed before there's any timber sales or fuels reduction. The goshawk is a Forest Service Region 5 sensitive species. It uses Sierra mixed conifer, red fir and aspen that has large trees, dense canopy, snags (dead trees), and down logs. Areas where these types of places exist it's more likely to have some goshawks. Surveys are conducted to determine where goshawks are and aren't nesting, and to determine additional management of goshawks. A typical PAC is roughly about 200 acre management area called a PAC (Protected Activity Center) and is established:

- If goshawks are still within an established PAC or does it need boundaries changes.
- Are Limited Operating Periods (LOPs) needed to avoid disturbance the breeding season from project activities.

Agency biology staff will annually conduct protocol surveys locate nests for Northern Goshawk, surveying to identify changes in historic nest location. I focused on the fuels reduction and also did OHV.

Methodology

The types of surveys I conducted for my individual project were: broadcast, intensive search, and historical use area surveys. I approached this project by having the proper forms, equipment and maps of designated areas that will be done. The forms needed for project for goshawk are the following: national goshawk monitoring protocol field from, summary form and incidental sighting. The equipment used are Garmin GPS, handheld radios, camera, topographic maps, kekker and clipboard & writing instruments. We use a kekker, which is broadcasting tool used when calling for goshawks. Once at the designated area, we used the Garmin GPS and topographic map to compare and know where to go. In a goshawk protected activity center (PAC), the call stations along each transect typically are 200m away from each other, and the adjacent transect stations are offset about 100m to get the maximum coverage of the area. While surveying the area we mark the call point stations on the GPS and flag on both sides of the road, so it makes it easier when we come back again to survey the PAC. According to the northern goshawk protocol, the procedure is to survey all potential goshawk habitats in the designated area until a goshawk is detected or the whole goshawk habitat is completely surveyed. If a goshawk is detected, we take a compass bearing and head towards it. Other items we look for when surveying for goshawks are feathers, sightings, vocalizations, roosts, nests, plucking posts (prey remains), and whitewash. When we find feathers we put them in our incidentals form and also put them in a Ziploc bag and write; date, time, observer name, coordinates, PAC number or project name, and type of feather. Whenever we hear or come across sighting of goshawk, a roost trees, a nests or plucking posts, we write them on the forms and write the degrees we saw the goshawk or what type of tree it has its nest

on or how much whitewash is around the area, etc. If there is plenty of white wash around an area or a kill site nearby, it's a sign that goshawk nest or roost tree is close by.

Project Outcomes

Some historical sites I worked on include fuel reduction projects such as; The Twofer project, General Sherman, Brown Rock, and prescribed burns which is silver / saddle. The OHV PACs I work on were; PAC19-01, PAC19-07, PAC29-04, and PAC29-05 just to name a few. For broadcasting/ intensive search I worked on; Brown Rock (Fuels Reduction Project) and Sidetracked (Fuels Reduction Project). Survey and monitoring will be used for input into environmental analysis document and for accomplishment reporting associated projects.

Conclusions

Overall, I learned much more about goshawks, owls, bats, trees, plants, bald eagles, peregrine falcon and bird feathers. I definitely strengthen my skills from last year, I got better at reading topographic maps, using the compass, and how to use the Garmin GPS. What I had trouble with last year was creating the lines of degrees on topographical maps, but this year I've master it. I got work more on my teamwork skills. I'm very solid in knowing where to find goshawks and owls after this past 2 summers. I feel very confident when it comes to doing surveying for owls and goshawk. I know both of their protocols. These skills helped me get through my individual project which was the OHV species monitoring for goshawk. I grew a lot from last summer that I was here, I was able to work faster because I knew what I was doing which is good for the deadlines we have for some projects. Even though this field isn't particularly what I'll be going into in the future, I have learned very important skills that will stay with me for a life time. Working with the wildlife crew was definitely something that I enjoyed and will remember.

Appendices

Examples of field work conducted in a group and individually:

Using Compass to get a bearing

Flagging call points

Using kekker to call for Goshawk

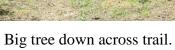**Examples of OHV trail incidents and finished pilot NABat program setup:**

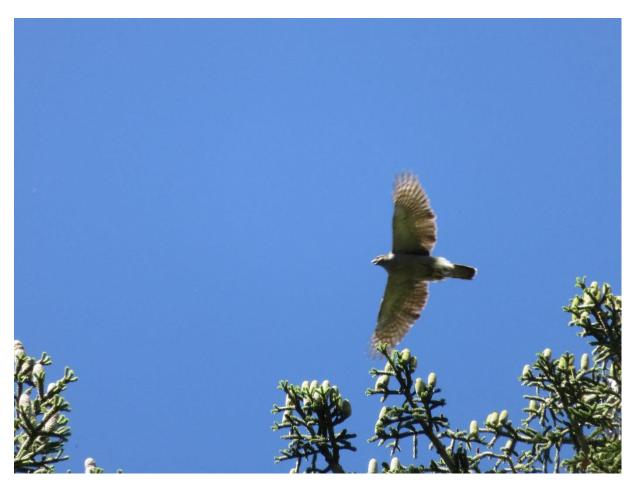Dead trees across trail

Fallen trees on trail

Big tree down across trail.

Finished pilot NABat program set-up.

Examples of Goshawk sightings:

Examples of items to find in Goshawk survey:

Nest

White wash

Feathers of kill site