

JOB COMPLETION REPORT
RESEARCH PROJECT SEGMENTSTATE CaliforniaPROJECT NO. W-47-R-16NAME Upland Game InvestigationsWORK PLAN IITITLE Special Wildlife Biological, ManagementJOB NO. 2TITLE and Special Survey Investigations
Status of Rare and Endangered Species,
Management & Special Survey InvestigationsPERIOD COVERED July 1, 1967 to May 30, 1968Abstract

A special wildlife species reporting program was initiated by the Department in May 1966. This consisted of reporting sightings of birds and nests of seven rare and endangered species of birds by Department employees during the course of their regular field duties. The program was reviewed in 1967, and six additional species of birds were included in the reporting program. A total of 1,868 birds and 44 nests were reported for the seven species listed for the period from May 1966 - April 1967, and 3,992 birds and 34 nests for 13 species from May 1967 - April 1968.

Such summaries of sightings can be used when enough data are available only as a rough index of the relative abundance for comparative purposes and not used as population estimates.

Objectives

To determine population trends, distribution, evidence of nesting, rookeries, and habitat requirements. Conduct censuses and/or surveys for evaluation in better management of the species.

Techniques Used

A reporting program was initiated by the Department in May 1966. This consisted of reporting the sightings of birds and nests of seven rare and endangered species of birds by Department employees during the course of their regular field duties. Personnel were encouraged to write in other rare species not listed. Employees reported sightings monthly to the regional office and an annual summary was provided headquarters for the period from May, 1966, through April, 1967.

The program was reviewed after one year of reporting data. The form was revised to include additional species, and instructions were refined to clarify reporting problems. Attached is a copy of the special wildlife species reporting card instructions and example. The program is essentially the same as it was set up in 1966 with the above-mentioned modification.

As an aid to the field identification of California raptors, a key and descriptive information was incorporated into a training program. Such a program is expected

to be expanded in efforts to train Department personnel in raptor identification, thus providing us with greater reliability in the overall special wildlife species reporting program.

Summarized Tabulations:

A special wildlife species reporting program has been in effect since May 1966. Department employees, while conducting their duties in the field, were asked to report all sightings of species and their nests listed on the reporting card with special instructions for those species not listed and where also considered rare or of special interest. A sighting is defined as an observation of a Bird or its active nest which can be identified by an employee in the course of his regular duties. Two or more birds seen at one time are tabulated as two or more sightings.

The results of the first two years of the special wildlife species reporting program is as follows:

Reported Sightings of Special Wildlife Species
by Department of Fish and Game Personnel
May 1966 - April 1968

<u>Species</u>	<u>Sightings</u> <u>May 1966 - April 1967</u>		<u>Sightings</u> <u>May 1967 - April 1968</u>	
	<u>Birds</u>	<u>Nests</u>	<u>Birds</u>	<u>Nests</u>
Condor	54	0	52	0
White-tailed kite	-	-	1,501	6
Goshawk	-	-	25	0
Red-shouldered hawk	92	2	129	2
Swainson's hawk	-	-	103	0
Rough-legged hawk	-	-	115	0
Ferruginous hawk	-	-	49	0
Golden eagle	1,122	10	1,241	6
Bald eagle	222	2	275	2
Osprey	259	29	305	17
Prairie falcon	91	0	98	0
Peregrine falcon	28	1	27	1
Pigeon hawk	-	-	24	0
Pileated woodpecker*	-	-	38	0
Total	1,868	44	3,982	34

* Special interest species and was a write in for the 1967-68 reporting program.

Number of sightings cannot be considered a population estimate nor can it be projected into a population total for those species listed. Such summaries of sightings can be used when enough data are available only as a rough index of the relative abundance from area to area, species to species, or period to period.

There were 1,868 sightings reported for seven species during the period of May 1966 to April 1967 with 44 nests. This compares with a total sightings of 2,138 birds and 28 nests for the same species during May 1967 to April 1968. In most all cases the number of individuals in each species observed increased over the previous year, with a decrease in reports of nest sightings for comparable species. Reports totaling 3,982 birds observed for May 1967 through April 1968 included 13 species with 34 nests being reported.

As reports of observations become routine and skill in identification is improved, the numbers of sightings is expected to increase if employee interest can be maintained.

An annual condor survey is conducted each year as reported in Work Plan II, Job No. 1. Condors observed by Department employees on this survey are not included in the above tabulation. These observations are evaluated and included in a report on the survey. Therefore, because of the special effort to locate birds, they are not included in this report.

Prepared by _____ Date July 18, 1968

Approved Wildlife Mgt. Supervisor Approved Chief, Wildlife Mgt. Branch

INSTRUCTIONS FOR RECORDING OBSERVATIONS ON SPECIAL WILDLIFE SPECIES

Purpose

The Fish and Wildlife Plan calls for greater emphasis on nongame wildlife and especially those species that are becoming rare or endangered. In order to establish a bank of information for the management of these species, observation cards will be used to document observations during routine work assignments. Valuable information will be obtained on distribution and occurrence of species from this information.

General Instructions

1. Record the number of birds sighted in the space immediately after the species.
2. Where nesting activity is observed, record the number of birds after the species and check the square provided when nest is known. Clarify in Remarks and map nest site on back of card.
3. Detail the location as accurately as possible with distance and direction to the nearest town.
4. Be sure and record your name and title along with the date observation was made. Thus observers can easily be contacted for additional information when necessary.
5. The card lists only selected species and will be expanded in the future as needed. Rare and endangered species that are not listed, such as wolverine and pileated woodpecker, may be written in on the blank space provided for other species.
6. Any questionable identifications should be substantiated in the Remarks section.
7. Only record those sightings made by you. Do not record second hand information.
8. Observations which are made daily near nesting sites should be recorded monthly with an explanation of the circumstances in the Remarks section. Separate sight records should be submitted when birds near a nest site are thought to be a new bird and have not been recorded earlier.
9. See example for reporting sighting.

Forward reports to the regional office at the end of each month. Negative reports are required when no observations were made during the month.

The regions will include a summary of the observations in the regular monthly report to headquarters.

EXAMPLE

SPECIAL WILDLIFE SPECIES REPORTING CARD

INSTRUCTIONS:

1. USE SEPARATE CARD FOR EACH SIGHTING AND SPECIES (WRITE IN NUMBER OBSERVED).
2. DETAIL ANY PERTINENT INFORMATION IN REMARKS SECTION ON BACK OF CARD.
3. MAP NESTING LOCATION ON BACK OF CARD.
4. USE BLANK SPACE FOR OTHER SPECIES.
5. RECORD POSITIVE IDENTIFICATIONS ONLY.
6. SEND CARDS TO REGIONAL OFFICE MONTHLY.
7. SEE INSTRUCTION SHEET FOR DETAILS ON REPEAT SIGHTINGS AND OTHER SPECIES.

SPECIES	NO.	SPECIES	NO.	SPECIES	NO.
CONDOR		ROUGH-LEGGED HAWK		PRAIRIE FALCON	
WHITE-TAILED KITE		FERRUGINOUS HAWK		PEREGRINE FALCON	
GOSHAWK		GOLDEN EAGLE		PIGEON HAWK	
RED-SHOULDERED HAWK		BALD EAGLE	3		
SWAINSON'S HAWK		OSPREY			
IF NEST INVOLVED, CHECK <input checked="" type="checkbox"/>		OTHER SPECIES			

LOCATION (DISTANCE AND DIRECTION FROM NEAREST TOWN) 10 mi. S.E. of Alturas
near Hwy 395 COUNTY Modoc
 OBSERVER (NAME AND TITLE) John Doe GM I DATE 10/1/67
 FG 832 (OVER)

Front

REMARKS:

PERTINENT ACTIVITY AT TIME OF SIGHTING: Pair of adults came to nest site
with fish to feed 1 young at nest.

Alturas ##

Hwy 395

Dry Creek Rd

* Nest 2 miles from Hwy 395 in pine

Reverse

Resources Agency of California
Department of Fish and Game

KEY TO THE RAPTORS OF NORTHERN AND CENTRAL CALIFORNIA

- | | | |
|-----|---|----------------------------|
| 1. | a. Large eagle or vulture-size birds. | 2 |
| | b. Small to medium size (red-tailed hawk in this group). | 9 |
| 2. | a. White head and tail. | <u>Bald eagle</u> (adult) |
| | b. Not with pure white head and tail. | 3 |
| 3. | a. Head white with black patch through cheeks. Mostly white below. | <u>Osprey</u> |
| | b. Not as above. | 4 |
| 4. | a. Tail white with dark terminal band. | <u>Golden eagle</u> (Imm.) |
| | b. Tail not white. | 5 |
| 5. | a. More or less uniformly dark below. | 6 |
| | b. Undersides of wings of contrasting shades or colors. | 8 |
| 6. | a. Wash of gold on hind neck. | <u>Golden eagle</u> (Ad.) |
| | b. Not as above. | 7 |
| 7. | a. Vulture-like birds with naked heads. Great size. | <u>Condor</u> (Imm.) |
| | b. Head feathered. Large massive bill. | <u>Bald eagle</u> (Imm.) |
| 8. | a. Extensive white underwing linings. Larger than eagle. Head yellow or orange. | <u>Condor</u> (Adult) |
| | b. Two-toned blackish wings. Smaller than eagle. | <u>Turkey vulture</u> |
| 9. | a. Tail white. Black patch on shoulder. | <u>White-tailed kite</u> |
| | b. Not as above. | 10 |
| 10. | a. Wings pointed. Wing-beats quick, pigeon-like. | 11 |
| | b. Wings not pointed. Flight not pigeon-like. | 14 |
| 11. | a. About size of crow. | 12 |
| | b. About size of jay or robin. | 13 |
| 12. | a. Wing pits (underside where wings join body) black. | <u>Prairie falcon</u> |
| | b. Wing pits not black. Bold black marks on cheek. | <u>Peregrine falcon</u> |
| 13. | a. Back and tail rufous. | <u>Sparrow hawk</u> |
| | b. Back bluish gray or dusky brown, tail barred. | <u>Pigeon Hawk</u> |
| 14. | a. Long-tailed, low flying hawk with conspicuous white rump patch. | <u>Marsh Hawk</u> |
| | b. Without white rump patch but often with white on tail. | |

15. a. Wings short and rounded. Flight characterized by several rapid beats, then a short glide. 16
 b. Large soaring hawks. Flight not as above. 18
16. a. Larger than crow. Light stripe over eye. Goshawk
 b. Smaller, without eye stripe. 17
17. a. Average size larger than sparrow hawk. Tail rounded. Cooper's hawk
 b. Size of sparrow hawk. Tail square or slightly notched. Sharp-shinned hawk
18. a. Tail dark rufous above. Red-tailed hawk
 b. Tail not dark rufous on upper surface. (Ad.) 19
19. a. Tail white or partly white.
 b. Tail without white (sometimes light colored at base). 20
 22
20. a. White tail with broad black band toward tip. Rough-legged hawk
 b. Tail without black band near tip. 21
21. a. White area confined to base of tail. Unmarked buffy wing linings contrasting with dark flight feathers. Swainson's hawk
 b. Entire tail white or very light rufous. Underside whitish. Ferruginous hawk
22. a. Tail light gray, not conspicuously barred, usually light colored at base. Red-tailed hawk
 b. Tail conspicuously barred throughout. (Imm.) 23
23. a. Chocolate colored band across upper breast, or entire underside chocolate. Swainson's hawk
 b. Not as above. (Ad.) 24
24. a. Tail heavily barred. Adults with rufous shoulders and underparts. Denizen of forest or riparian habitat. Red-shouldered hawk
 b. Tail narrowly barred. Denizen of prairies and plateaus. Swainson's hawk

Resources Agency of California
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AN AID TO FIELD IDENTIFICATION OF CALIFORNIA RAPTORS

Vultures (2 species)

Turkey Vulture

Nearly eagle size (spread 6 ft.). Two-toned blackish wings, front part dark, hind part contrastingly lighter. Soars with wings slightly above horizontal (forming dihedral). Rocks and tilts unsteadily. Small naked head red. in adults, black in immatures.

Condor

Nearly twice the size of turkey vulture (spread 9 ft.). Adults with yellow or orange heads and white wing linings. Immatures with dusky heads, lack white wing linings. Soars with flat wing plane. Does not rock or tilt. Restricted range.

Eagles (2 species)

Golden Eagle

Large, long-winged hawk. Adult evenly dark below. Look for wash of gold on hind neck. Immature shows white flash in wings at base of primaries, white tail with dark terminal band. Intermediate plumages exist.

Bald Eagle

About same size and spread as golden eagle (spread $6\frac{1}{2}$ to 8 ft.). Adult with white head and tail unmistakable. Immature a plain dusky bird, shows white in wing linings and sometimes on breast. Large massive bill distinctive if seen closely enough. Adult has yellow bill. Habitat: coast, lakes, rivers.

Osprey (1 species)

Large (spread $4\frac{1}{2}$ to 6 ft.) blackish above, white below. Head white with broad black patch through cheek. Flies with crook in wings, showing black patch near bend of wing. Hovers on beating wings and plunges feet first for fish. Habitat: coast, lakes, rivers.

Buteos (5 species)

Red-tailed Hawk

Large (spread 4 to $4\frac{1}{2}$ ft.), broad-winged, round-tailed hawk. Variable from dark to light color phase. Adult has upper surface of tail conspicuously red. Immature has dark gray tail, light colored at base. Under parts of red-tailed hawk: light breast, broad band of streakings across belly. Our commonest Buteo. Voice: a distinctive scream.

Red-shouldered Hawk

Smaller than red-tailed hawk. Heavy dark bars across tail. Adults have rufous shoulders and pale robin-red underparts. Immatures streaked below. Usually found in riparian habitat. Distinctive repeated call.

Swainson's Hawk

Most variable color-wise of the Buteos. Medium size. Adult has solid chocolate colored band across breast. In dark phase individuals entire underside is this color. Immatures have streaked underparts. Tail has narrow bars. Tail is usually whitish at base on upper surface, can thus be confused with immature red-tailed hawk. Overhead the unmarked buffy wing linings contrast with the dark flight feathers. Does not winter in California.

Rough-legged Hawk

Size of red-tailed hawk but with longer tail which is normally white with broad black band toward tip. Head and neck usually whitish. Wide black band on belly. Often hovers in one spot with beating wings (like sparrow hawk, osprey and kite). Seen only in winter in California.

Ferruginous Hawk

Slightly larger than rough-legged hawk. Generally rufous above and whitish below. Best field mark is the rather long tail which is whitish or light reddish without terminal black band.

Harrier (1 species)

Marsh Hawk

A slim, long-tailed hawk with a conspicuous white rump patch. Usually seen gliding low over open country. Color varies from very light gray (male, breeding) to dark reddish brown (young of the year), but the white rump plus characteristic flight are diagnostic. Quite common. Nests on the ground.

Accipiters (3 species)

Goshawk

All Accipiters have short, rounded wings and long tails. They fly with several rapid beats and a short slide. Females are considerably larger than males. Adult goshawk has blue-gray back, underparts whitish, finely barred with gray. Immature is gray-brown above, streaked below. A light stripe over eye distinguishes this largest Accipiter from the other two. In California breeds in high mountains, winters in the valleys.

Cooper's Hawk

Body size averages a little less than a crow. Adults have blue-gray backs, rusty breasts. Immatures are brown, streaked below. End of tail rounded. Much at home darting in and out of thickets.

Sharp-shinned Hawk

Similar to Cooper's hawk but averaging about sparrow hawk size. However, size of male Cooper's hawk and female sharp-shin nearly identical. Sharp-shinned hawk is included to have square or slightly notched tail. Habits of these two species are similar. All Accipiters feed mainly on birds.

Kites (1 species)

White-tailed Kite

Shaped like a falcon but with long tail. Pale gray with white head, tail and underparts, black shoulders. Immature somewhat rusty, but easily recognizable. Hunts for small rodents over marshes, meadows and fields. Often hovers in the air on beating wings.

Falcons (4 species)

Peregrine Falcon

All falcons have pointed wings, quick, pigeon-like wingbeats. In our area we are concerned with two nearly crow-size falcons, the peregrine and the prairie, and two much smaller species, the pigeon hawk and the sparrow hawk. Peregrine falcons have bold facial marks (tear drops). Adults are slaty-backed, pale below with bars and spots. Young birds are dark brown above, heavily streaked below.

Prairie Falcon

Very much like peregrine falcon but of a paler, sandy color, less conspicuous facial markings. Look for black "wing pits" on the underside where wings join body. This is an infallible field mark. Semidesert and desert habitat.

Pigeon Hawk

Suggests a miniature peregrine falcon, without bold facial markings. Has conspicuously barred tail. Size of jay.

Sparrow Hawk

Our only common falcon. No other small hawk has a rufous back or tail. Black and white face pattern. Commonly perches on poles, wires, etc. Often hovers on rapidly beating wings.