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Project: Nongame Wildlife Investigations Job Number: II-5  
Job Title: Falconry Monitoring Program Job Type: Survey and Inventory  
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## SUMMARY:

Falconry, an ancient and sophisticated sport, is still being practiced today. Because of the interest in the sport and the need to control the take of birds, the California Fish and Game Commission, as authorized by legislative mandate, has established certain regulations. These regulations help to ensure the protection of wild raptor populations and optimum care of the individual raptors involved. In recent years there has been an apparent downward trend in the number of individuals involved in the falconry program. Although there were fewer licenses issued during the 81-82 period, there was a slight increase in the number of birds held per licensed falconer over the 80-81 period (.90 birds per licensed falconer in 1980-81 compared with 1.01 birds per licensed falconer in 1981-82). Changes were made in falconry regulations to aid the Department in raptor management and law enforcement and to reduce unnecessary or overburdensome aspects of the regulations.

## BACKGROUND:

Falconry regulations were first enacted in 1957 when a total of three licenses were issued. To qualify for a falconry license an applicant must be familiar with the natural history and care of raptors, and pass a written exam covering the rules and regulations governing falconry. Appropriate housing must be provided for the birds held under a falconry permit. When the above qualifications are met and a \$25.00 fee is paid, the applicant is issued an apprentice falconry license.

License classes have been established by the Fish and Game Commission and are as follows:

- 1) Apprentice: Beginning falconers must be 16 years or older and may possess a single bird, either an American Kestrel or a Red-tailed Hawk.
- 2) General: The applicant must have two years of experience at the previous level (or the document equivalent) and is allowed to possess two birds.
- 3) Master: Five years of experience is required at the previous level and this class permits the falconer to possess three birds.

California falconry regulations have been revised periodically to keep pace with the need for stricter control of the capture of selected raptor species. In 1968, the Peregrine Falcon was placed on the protected species list in California and consequently this endangered raptor can no longer be harvested from the wild in the state. The Gyrfalcon, Harris' Hawk, and Goshawk were placed on the list of protected species and the Prairie Falcon, another protected species, could only be taken through a California Department of Fish and Game lottery held during years in which there was (adequate/normal) reproduction of young.

In August 1981, major revisions were made in the falconry regulations (Section 670, Division 1, Title 14, California Administration Code - Practice of Falconry). The most important of these revisions include provisions to prohibit take of certain raptors for use in falconry, to set quotas on take of species, and to regulate the take of raptors in certain geographic areas of the state as needed to protect wild populations.

Prior to 1981, falconers could legally trap most species of raptors in California. The recent revision of the falconry regulations permit only birds from a specified list of raptors to be taken. The following raptors are authorized to be taken from the wild in California for use in falconry: Goshawk (Accipiter gentilis), Cooper's Hawk (A. striatus), Red-tailed Hawk (Buteo jamaicensis), Ferruginous Hawk (B. regalis), Prairie Falcon (Falco mexicanus), Merlin (F. columbarius), American Kestrel (F. sparverius), and Great Horned Owl (Bubo virginianus). These birds are among the most popular species for falconry and account for about 90% of all raptors used in the sport. This specific list offers protection to species such as the Swainson's Hawk (B. swainsoni) because of its declining status, and the Marsh Hawk (Circus cyaneus), Red-shouldered Hawk (B. lineatus) and Rough-legged Hawk (B. lagopus), which are unimportant as falconry birds.

Other raptors that can not be obtained from the wild in California may still be legally imported from other states or obtained from breeders. Peregrine Falcons, Gyrfalcons, and numerous exotic and hybrid raptors are included in this category. When these birds are added to the list of birds obtainable from the wild, about 95% of all raptors used in the sport of falconry are included.

A Department issued capture permit is another 1981 revision. This approach is expected to help distribute raptor capture pressure and implement the quota system. Quotas may be set on numbers of raptors taken, locations of raptor capture, and on the species taken such as the Prairie Falcon and possibly the Goshawk.

Other revisions include changes in the banding requirements. Previously, raptors had to be banded with both a state and a federal band. The falconer received the federal band in the mail and applied it himself, whereas the state band was applied by a Department of Fish and Game warden. Falconers contended that the two bands weighted down and defaced the birds, and provided unnecessary stress on the raptor. Currently, the state band requirement has been eliminated, and the federal bands sent to the falconer by the U.S. Fish and Wildlife Service must be applied by a state game warden. Some modification of the federal band (such as marking it with a drop of colored epoxy) will satisfy the state regulatory needs without the necessity of a second band.

In addition, certain regulations deemed overly restrictive were liberalized. For example, importation and exportation regulations were relaxed, and licenses can now be issued based on equivalent experience rather than requiring all first time California falconers to serve a term of apprenticeship. The remainder of the revisions clarify certain terms and restrictions and generally serve to streamline the falconry regulations.

The impact of falconry on California's wild raptor population is of great concern and warrants further studies to determine any detrimental consequences which may arise. Future studies should include an examination of the impact that human disturbance has on the reproductive success of wild raptors.

#### OBJECTIVE:

The primary objective of the Falconry Monitoring Program is to ensure that the sport of falconry does not jeopardize the populations of native birds of prey or further

plete those populations faced with extinction. In the event that there is a threat to the raptor resource due to its use in falconry, the Fish and Game Commission and the Department of Fish and Game will impose the necessary restrictions to ensure protection of the wild populations.

#### PROCEDURES:

Falconers are required to submit an annual report to the California Department of Fish and Game on their falconry activities and the raptors they use in the sport. This report provides details on the species and numbers of raptors in possession at the beginning of the season, the number of birds acquired and how they were acquired, the number of birds lost and why they were lost, and the total number of raptors in possession at the end of the reporting period.

During the falconry reporting period, the report forms are mailed to all licensed falconers. Those falconers who do not return their reports are notified and if reports contain any discrepancies, letters are sent out to request clarification.

Reported information is compiled and data are recorded by falconer's name, geographic region of residence, and species used in the sport. Species information is further classified as follows:

- 1) Birds obtained from breeders or falconers.
- 2) Birds caught in the wild as nestlings or adults.
- 3) Birds obtained from a rehabilitation center or from the Department of Fish and Game.
- 4) Birds lost due to escape, release, or death.
- 5) Birds transferred to breeders or to other falconers.

#### FINDINGS:

During the 1981-82 falconry report period, 391 licenses were issued, continuing a downward trend in numbers of licenses issued each year since the slight increase documented in 1977 (Figure 1). The number of inactive falconers (those individuals who were issued a license but did not possess any raptors during the year) was up to 34% of all licensed falconers in 1981-82.

The number of species used in the sport showed a slight decrease, perhaps due to the change in regulations. In 1981-82, 24 species were used in the sport of falconry as opposed to the total of 27 species used in 1980-81. The popularity of individual species also changed during this report period. The Harris' Hawk was the raptor most frequently used for falconry in 1980-81 and was followed by the Red-tailed Hawk, Prairie Falcon, Goshawk, and Cooper's Hawk. By comparison, the most popular falconry bird of 1981-82 was the Prairie Falcon, perhaps a reflection of the elimination of the Prairie Falcon management plan and restructuring of the procedures governing its capture from the wild, one of the 1981 falconry regulation revisions. Following the Prairie Falcon in popularity are the Red-tailed Hawk, Harris' Hawk, Goshawk, Cooper's Hawk, and Peregrine Falcon. These six species account for 82% of all species used by falconers in California falconry (Table 1). The Merlin, the Kestrel, the Prairie Falcon X Peregrine Falcon Hybrid, and the Great Horned Owl follow the first six species in order of popularity. The remaining 14 species listed account for only 7% of the total number of raptors used for the sport of falconry.

Figure 1

## CALIFORNIA FALCONRY LICENSES, 1957-1982

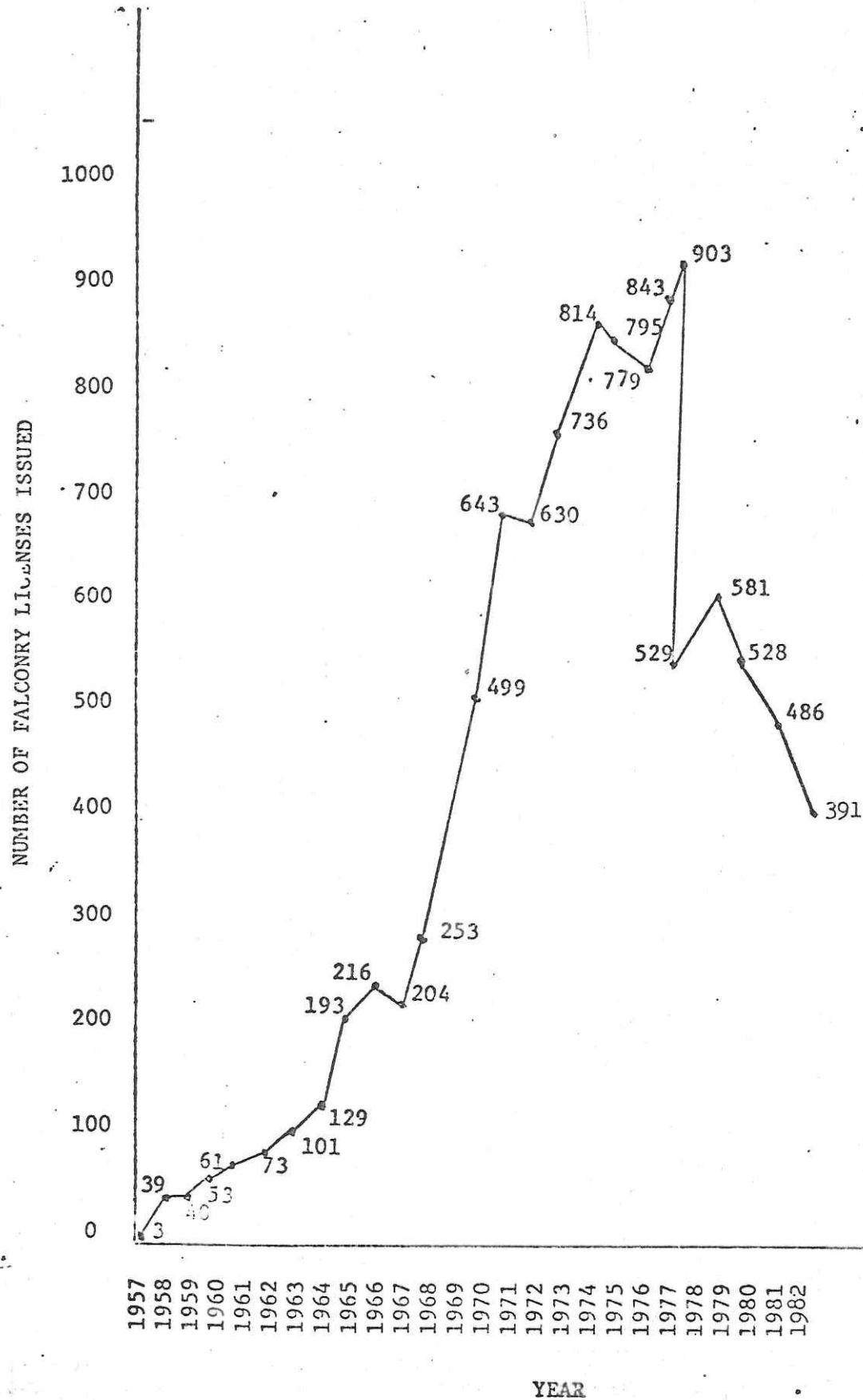


Table 1. Raptors Most Frequently Used for Falconry  
1981-82

<u>Species</u>	<u>Numbers Held at End of Season</u>	<u>Percent</u>
Prairie	84	21.4
Redtail	71	18.1
Harris	66	16.8
Goshawk	56	14.2
Peregrine	23	5.9
Coopers	21	5.3
Peregrine x Prairie	16	4.1
Great Horned Owl	10	2.5
Merlin	9	2.3
Kestrel	9	2.3
Others	<u>28</u>	<u>7.1</u>
	393	100.0



The total number of birds held under falconry permits decreased by about 10% with 393 in 1981-82, compared to 436 in 1980-81. The Prairie Falcon showed a marked increase in numbers held during 1981-82 (Table 2), but, in general, the numbers held of each species showed a decrease from last year.

Bird loss during the 1981-82 year was approximately 35%, not significantly different from the 36% reported for 1980-81 and the 37% loss reported for 1979-80.

The captive raptor breeding program, authorized by the Fish and Game Commission, is responsible for the increased number of captive-reared birds used by falconers. of the five most popular species of raptors used, 12.4% were obtained from breeders and 48% were taken from the wild (Table 3). Although this may not seem to be a dramatic increase over the 11.4% and 12.0% of acquired birds obtained from breeders demonstrated in the 1979-80 and 1980-81 years respectively, nor a dramatic decrease in birds obtained from the wild (60.8% in 1979-80 and 58.9% in 1980-81), if the reduced number of birds acquired during the 1981-82 season is taken into account, the difference is relatively greater than at first perceived. (The Peregrine Falcon was excluded from these calculations because its captive production figures increased significantly just this last season, therefore figures were not available for comparison for the years 1980-81 and 1979-80.)

The number of captive raptor breeding projects has remained about the same (40-46) during the last two seasons. These projects are classed as either scientific or recreational. In scientific captive raptor breeding projects, 50% of the birds produced can be released to the wild by the Department and the remaining 50% can be transferred to an authorized recipient including researchers, breeders, and falconers. All of the birds produced in the recreational breeding projects can be transferred to an authorized recipient, the transfer left to the discretion of the breeder. Some breeding projects are listed as both scientific and recreational. In 1980-81, 74% of the breeding projects were labelled as scientific with 38% classed as recreational (with 8% overlap). In comparison, 1981-82 saw 58% of the breeding projects classed as scientific and 50% as recreational. The demand for captive-reared birds continues to be high and the breeding program, particularly the increase in the number of recreational breeders, may remove some of the harvest pressure on wild raptor populations.

The majority of the falconers (56.5%) in California reside in the Department of Fish and Game Region 5 which includes the southern desert and the major metropolitan areas of Los Angeles and San Diego (Table 4). Region 5 is followed by Region 3 (27.4%), the central coast of the state including several population centers, and Region 2 (11.2%), the north-central portion of the state.

#### ANALYSIS:

The findings illustrate a continuing downward trend in the number of licensed falconers. This may be due to the recent implementation of the federal written exam, the increase in the falconer's license fee to \$25.00, and/or the increased restrictions appearing in the 1981 regulations revision which make it somewhat more difficult to acquire and maintain a falconry license.

The increase in availability of captive reared birds will probably continue and may eventually represent a significant percentage of all raptors used in the sport. This is particularly true of hybrid raptors which are popular with falconers and can only be acquired from breeders.

Table 2. Summary of numbers and kinds of raptors held  
under falconry licenses 1980-81 and 1981-82

Species	Year	Held	Acquired	Lost	Released	Escaped	Killed	Died	Transfer	Other
airie/ alcon	80-81 81-82	82 84	82 51	54 38	6 2	14 20	1 1	6 4	21 11	6 0
1-tailed awk	80-81 81-82	85 71	109 73	71 58	23 19	31 27	1 0	2 5	11 7	3 0
cris' awk	80-81 81-82	86 66	46 17	24 18	1 1	2 3	0 1	3 0	16 14	2 0
shawk	80-81 81-82	58 56	53 35	50 30	9 3	16 10	0 0	7 3	13 11	5 3
regrine alcon	80-81 81-82	24 23	20 20	13 20	0 0	3 2	0 0	1 1	9 17	0 0
ofer's awk	80-81 81-82	32 21	48 24	42 26	15 2	18 18	0 0	4 0	1 4	4 2
airie/ eregrine	80-81 81-82	15 16	12 11	7 4	0 0	0 1	0 0	1 1	6 2	0 0
ect Horned wl	80-81 81-82	9 10	7 7	3 4	2 2	0 0	0 0	0 0	0 2	1 0
rlin	80-81 81-82	14 9	19 12	16 15	5 2	5 8	0 1	1 1	2 3	3 0
strel	80-81 81-82	11 9	20 18	20 14	11 2	6 9	1 0	1 3	0 0	1 0
airie/ yr falcon	80-81 81-82	2 5	2 4	0 1	0 0	0 0	0 0	0 0	0 1	0 0
arp-skinned lawk	80-81 81-82	5 3	7 2	6 3	2 0	2 2	1 0	0 0	0 0	1 1
eruginous	80-81 81-82	2 3	2 3	0 2	0 1	0 1	0 0	0 0	0 0	0 0
er falcon	80-81 81-82	2 2	1 3	1 2	0 0	0 1	0 0	0 1	1 0	0 0

Table 2 (con't)

Species	Year	Held	Acquired	Lost	Released	Escaped	Killed	Died	Transfer	Other
grine/ Falcon	80-81 81-82	2 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
en le	80-81 81-82	2 2	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0
tail/ ris' Hawk	80-81 81-82	2 1	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
shouldered k	80-81 81-82	1 0	2 0	1 0	0 0	0 0	0 0	0 0	0 0	1 0
ted le	80-81 81-82	0 0	0 0	1 0	0 0	0 0	1 0	0 0	0 0	0 0
h k	80-81 81-82	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
r	80-81 81-82	0 1	1 1	1 0	0 0	0 0	0 0	0 0	1 0	0 0
le	80-81 81-82	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
er	80-81 81-82	0 1	0 1	1 0	0 0	0 0	0 0	0 0	1 0	0 0
er	80-81 81-82	0 0	1 0	2 0	0 0	0 0	0 0	0 0	2 0	0 0
id (?)	81-82	7	4	1	0	0	0	0	1	0
	80-81	436	434	313	74	97	4	26	82	27
1	81-82	393	290	237	34	102	3	19	73	6



Table 3. Comparison of numbers and methods of acquiring most popular raptors, 1979-80, 1980-81, and 1981-82

Species	Numbers of Birds Acquired											
	Total			From Breeder			From Wild			Other		
	79-80	80-81	81-82	79-80	80-81	81-82	79-80	80-81	81-82	79-80	80-81	81-82
Prairie Falcon	56	82	51	22	22	12	12	27	12	22	33	27
Red-tailed Hawk	87	109	73	0	1	3	63	79	51	24	29	19
Harris' Hawk	39	46	17	9	11	6	12	11	0	18	24	11
Goshawk	44	53	37	0	5	4	38	36	16	6	12	17
Peregrine Falcon	--	--	20	--	--	11	--	--	1	--	--	8
Cooper's Hawk	47	48	24	0	1	0	41	46	18	6	1	6
Total <sup>1/</sup>	273	338	202	31	40	25	166	199	97	76	99	80
Percentage of Total:												
<sup>1/</sup> excluding Peregrine Falcon	11.4%	12.0%	12.4%	60.8%	58.9%	48.0%	27.8%	29.3%	39.6%			

Table 4. Comparison of numbers of falconers by Department of Fish and Game Region, 1981-82<sup>1/</sup>

Region	Numbers of Licenses			Numbers of Birds Held		
	1	2	3	4	5	Total
1	10	2.6%	6	1.5%		
2	44	11.2%	63	16.0%		
3	107	27.4%	106	27.0%		
4	9	2.3%	8	2.0%		
5	221	56.5%	210	53.5%		
Total	391	100%	393	100%		

<sup>1/</sup> Based on annual reports received by November 1, 1982.

RECOMMENDATIONS:

1. Continue to administer the falconry program through regulations that effectively ensure the protection of the wild raptor populations.
2. Implement newly adopted regulations where needed to impose restrictions, quotas, or geographic closures in order to protect wild raptor populations.
3. Monitor the take of Prairie Falcons and Ferruginous Hawks to determine the effect of harvest pressure.
4. Review data on the take of Goshawks from the wild in California in recent years to determine the effect on the population of increased take noted in recent years.
5. Monitor the use of captive-reared birds in California to determine what impact, if any, this has on the take of wild raptors.

Prepared by:

Janet M. Didion  
Janet M. Didion  
Graduate Assistant

Approved by:

Robert D. Mallette  
Robert D. Mallette  
Nongame Wildlife Coordinator

Approved by:

Eldridge G. Hunt  
Eldridge G. Hunt, Chief  
Wildlife Management Branch

Date:

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