

TRAPPING METHODS USED FOR THE MIGRATORY FALCONS IN PAKISTAN

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Abstract

Falcons belong to family Falconidae. These are migratory birds. Many species of falcons visit Pakistan i.e. Saker Falcon (*Falco charrug*) Peregrine Falcon (*Falco peregrinus*) etc. The survey of migratory falcons was conducted in D.I.Khan, Mardan, Swabi and Nowshera districts of NWFP. It has been observed that Bala Aba Shaheed, Oubha, Kheshki Maira, Aman Garh, Marathi Maira, Naranji Maira, etc are the hot spots of hunting/trapping of migratory falcons in NWFP.

During the survey it has been observed that Khudhu, Paidam, Trangri, Dogazza and Patti methods are used for the live catching/trapping of migratory falcons in these areas.

The Government of Pakistan has signed International Conventions like CITES, CMS etc. According to the CITES convention Appendices list (www.cites.org) the peregrine falcon is placed in the list of in Appendix I and Saker falcon is in the Appendix II. Whereas both these species are included in the list of Appendix II of the CMS.

Introduction

Raptors or Birds of Prey belong to a group of large birds that hunt during the daytime rather than night. These include hawks, kites, buzzards, falcons, eagles and certain vultures. Eagles are the largest of this family. The raptors are flesh eating and most of them preferring to kill their own prey. Some of them, which include vultures, feed upon the carcasses of dead animals (Perry, 1990).

The most famous among the raptors are the members of *Falconidae* family of the order *Falconiformes*. These include Saker (*Falco cherrug*), Laggar (*Falco jugger*), Gyr falcon (*Falco rusticolis*), Peregrine (*Falco peregrinus*), Kestrels (*Falco naumanni*) and Hobby (*Falco subbuteo*). Falcon is a common name for members of a family containing 60 species of hawks. In size they range from 15 to 60 cm (6 to 24 inches), the female falcon is larger than the male. Training of falcons or hawks to capture wild game or fowl for the hunter. Falconry is of Oriental origin and of great antiquity.

It was introduced by the Romans into Europe. Different falcons are used to hunt different kinds of quarry. For example, male Peregrine is used for snipes and partridges. Gyr falcon is used for herons. Goshawk is used for rabbit, hare and pheasant. Peregrine and Saker are used for Houbara bustard.

Falconry is very popular in Saudi Arabia and Gulf countries. Arab dignitaries are invited by the Government of Pakistan to hunt Houbara bustard, which visit desert and semi-desert areas for wintering. Different species of falcons are trapped in Pakistan to meet the demand of the Arab falconers. Different species of *Falconidae* family are used as live decoys to attract and conventional trapping of Saker and Peregrine falcons. The

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priced birds are then purchased by the representatives of these wealthy Arabs and exported for necessary training for Houbara bustard hunting.

Due to declining status of falcons and obligations of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), only limited trapping and export was being permitted by Pakistan. On follow up of the CITES Secretariat advice, the netting and export of all falcon species has been banned. But due to high demand and lucrative prices in the Gulf countries, every effort is made to smuggle the remaining falcons. The most precious falcons which are used in falconery are Saker and Peregrine falcons.

Saker Falcon (*Falco cherrug*):

The Saker is a much browner bird than the Peregrine. Its tail instead of being cross-barred tends to show large pale spots, not extending right across both webs. The crown is pale often white or pale buff with dark streaks. Adults have dark sepia brown centre to the feathers of back and wing shoulder, each feather narrowly margined paler rufous.



Saker Falcon, *Falco cherrug*

The long pointed wings have blackish flight feathers, spotted with white on their inner webs and edged with buff. Saker is a winter visitor, found both in the mountain regions and the foothill country around Mianwali, Kohat and Attock districts. But it may occur, in the desert border regions of Punjab and Sindh, as well as in the Indus delta. In NWFP locally it is known as Cherrug. The population which winters in Pakistan breeds in central USSR from Trans-Caspia to Kazakhstan (Robert T.J.1991).

This falcon can be trained to hunt Houbara bustard (*Chlamydotis undulata*) and Gazelle (*Gazella bennetti*) and hence is much sought after by Arab falconers. This has undoubtedly led to their rapid disappearance from Pakistan where a good condition female would fetch very high price in millions.

Always seen solitarily and usually in bare open countryside such as saline flats or bare gravelly plains. They will hunt, like Peregrines circling high over their prey and killing their quarry after a steep aerial dive, binding onto a bird and carrying it down to the ground. This is the techniques used by trained birds trundled by falconers, but in the wild a lot of its hunting is done by swift low direct flight, reportedly striking at a fleeing bird from behind. They are said to feed upon Spiny-tailed Lizard (*Uromastix hardwickii*), Sand Rats and Jerboas (*Allaetaga* spp.) Rodents (*Meriones* sp.) are more easily available than reptiles in winter in the cold steppic plateau regions of Balochistan. They make no nest, laying their eggs on a bare earth ledge, or use the nest of another bird such as an abandoned Scavenger Vultures nest (*Neophron*). They nest usually on cliffs but occasionally use a tree. They are said to avoid human artifacts such as ruined buildings, a favored nest site for other falcon species, 3 to 5 eggs are usually laid from late March. The female does most of the incubating, with the male gathering most of the food prey. (Erwda, International Research Report, 1997).

Peregrine Falcon (*Falco peregrinus*)

The Peregrine Falcon (*Falco peregrinus*) is a winter visitor occurring very widely in the Indus plains, most likely to be encountered around large lakes or irrigation barrage seepage zones where waterfowl provide ample food resources. Occasional individuals can be encountered along the mangrove creeks and Karachi seacoast in winter. In NWFP it is locally known as Bhari/Bhara.



Peregrine Falcon, *Falco peregrinus*

It is very much sought after by Arab falconers who pay a higher price for large females in good plumage, even higher than for the Saker *Falco cherrug* (Robert T.J. 1991). Peregrine is a typical ducks hawk. It certainly frequents regions where waders and waterfowls abound and normally occurs solitarily in its winter quarters. It is a very bold and aggressive hunter, striking most of its prey in the air, making steep dives and plunges, or pursuing its prey with fast low flight, twisting and turning with every evasive flight of quarry.

They breed extra-limally preferring inaccessible ledges on cliffs and often utilizing the same site year after year. Virtually no nest lining is made and the normal clutch is 3 to 4 eggs laid over a period of eight to nine days. The male does a small share

of the incubation but mostly assumes the role of food provider, bringing food to his mate as a part of the courtship ritual also (Erwda, 1997).

Materials and Methods

The survey methodology was development of questionnaire, interview of the hunters & other locals and field observation in the hunting camp sites, with the help of spotting scope, binocular and field guide book.

Results & Discussion

In order to study the trapping methods of migratory falcons, a survey of D.I. Khan, Mardan, Swabi and Nowshera districts was conducted in September, 2007. During the survey of districts D.I. Khan, Mardan, Swabi and Nowshera, it was observed that Bala Aba Shaheed, Oubha, Sadra Sharif and Ghara Hayat are the most suitable habitat of falcon trapping area in district D.I. Khan, while in District Nowshera Jalozei maira, Azakhail maira, Kheshki maira, Aman Garh and Marathi maira are the hot spots of falcon trapping. In district Swabi, Maina maira, Batakar maira, Naranji maira are good habitat of falcon. In Mardan district Peepal or Kohi maira, Tooru maira, Baboo or Ghumbat maira were the hot spots of hunting /trapping of migratory falcons. These mairas have the characteristics of bare open country side such as saline flats or bare gravelly plains, which also provide the falcons abundant food like lizards, rats, jerboas and other rodents.



The following five methods were observed for the live catching/ trapping of migratory falcons in these areas.

1. Khudhu

Majority of the Falcon hunters/trappers use this method for the trapping of live falcons. In this method the feathers of quails/partridge/pigeons are tied with the nylon string. This feather ball is then tied to the leg of Kestrel, long legged buzzard/laggar falcon (decoys) when the hunter see the migratory falcon (Saker/Peregrine) in the air they throw the laggar/long legged buzzard with tied feather ball in the air, the migratory falcons

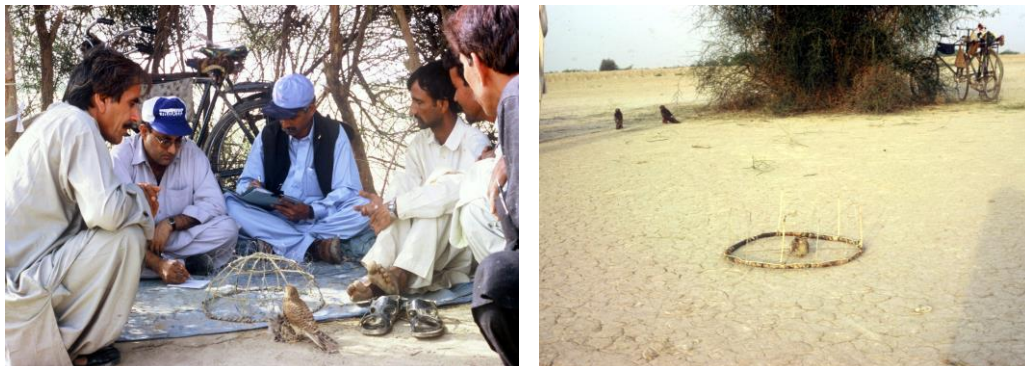
during flight see the prey in the leg of laggar and they try to catch the prey. In this way their legs get entangled with the nylon string and the falcon with the decoy comes down and the hunters trap the falcon.



(Khudhu)

2. Paidam

In this method a basket made of mulberry sticks covered with the nylon nets are used. A prey i.e. quail/pigeon/partridge is placed inside the basket. When the migratory falcons see the prey they try to catch the prey and this way the string/net get entangled with the legs and the falcon is trapped. These baskets are also placed near the rodents dens.



Paidam

3. Trangri

In this method a quail is tied with the cotton thread net over the whole body, and the quail is tied with the string. When the migratory falcon tries to catch the quails, their legs get entangled in the net and in this way the wild falcons are trapped.



(Trangri)

4. Dogazza

In this method three to four sticks of 6 feet in length are used and fitted in V or U shaped which are four to five feet in height and cover the sides by the nylon net with one side open. On this open side a pigeon (prey) is entangled with the help of nylon thread to attract the falcon for hunting. When the migratory falcons see the prey it tries to catch the prey in this way the migratory falcon is trapped in nylon net.



(Dogazza)

5. Patti

In this method 10 to 15 feet long net is fitted with the help of two wooden or iron rods this net is approximately 5 to 6 feet in height. This type of nets are fitted in a series pigeons are entangled with the help of nylon thin thread in front of each net, to attract the falcons. The migratory falcon when attack on the prey (pigeons) and wants to take the prey, it entangled in the net and the trapper catches the falcon.



(Patti)

During the survey it was observed that Khudhu method is mostly used in all the districts. It is also known as Pandos in Swabi, Nowshera, Mardan and Peshawar Districts, while in D.I. Khan it is known as Khudhu. The Tarangri and Pandos are also used in D.I. Khan while this method is not popular in other districts whereas Dogaza and Patti method is commonly used in district Mardan and Nowshera.

Majority of hunters/trappers use kestrel spp. for trapping falcons, few hunters use long legged buzzard, while very less number of hunters use Laggar, partridge, quails etc. The prey species (decoys) for the trapping of falcon were only used for one season. Few hunters reported that the birds (decoys) used for the trapping of falcons died during the process of trapping while the rest of decoys were released after trapping.

The Government of Pakistan has signed many International conventions for the conservation of wildlife species and their habitat. The CITES and CMS convention address the falcon species.

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES)

Pakistan signed Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) during 1973 and ratified it in 1976. The globally endangered species are categorized in three appendices in accordance with the degree of threat the species is facing due to international trade. The critically endangered species are listed on CITES Appendix I while medium category species are listed on CITES Appendix-II and so on. The Inspector general of Forests as Member Secretary and Head of Department of National Council for Conservation of Wildlife (NCCW) is the "Management Authority" to approve the trade in CITES listed species. The Provincial Wildlife Departments, Zoological Survey Department and Pakistan Forest Institute are the "Scientific Authorities" for better implementation of CITES.

In order to fulfill the obligations of CITES and to protect natural wealth of the country, the Government of Pakistan have imposed moratorium on commercial trade of all wild mammals and reptiles. Commercial export of protected/ CITES Appendix-I and II, species is not being allowed as reflected in Export Policy Order. The export/import of CITES listed animals are only allowed, when CITES formalities are met in accordance with the procedure.

Due to lack of trained staff, especially in Customs Department, sometimes, illegal trade takes place. Moreover, lack of awareness among the stakeholders about CITES regulations, causes problems at various levels for effective enforcement of CITES. To overcome these bottlenecks, the Federal Law for the implementation of CITES and other International Conventions has been drafted jointly by NCCW and IUCN-The World Conservation Union.

CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS (CMS)

Pakistan signed Convention on Conservation of Migratory Species of Wild Animals (CMS) also known as Bonn Convention in 1971 and ratified it in 1987. The globally endangered migratory species are placed in two categories, Appendix I containing critically endangered species like Snow Leopard, Siberian Crane and Marine Turtles. Pakistan is wintering habitat for a number of migratory species of birds reaching through famous migration route, "Indus Flyway". Many species of *Anatidae* family and cranes, waders, gulls, egrets, herons storks etc. visit Pakistan each year for wintering in addition to a good number of bustards sandgrouses and raptors. In compliance with the provisions of the Convention, Pakistan strictly enforces the relevant regulations for the sustainable use/protection of migratory species.

Complete protection is provided to the Appendix-I species under the Provincial Wildlife Laws. A good number of wintering habitats are covered under the protected areas system (National Parks, Wildlife Sanctuaries and Game Reserves). In a recently launched "Pakistan Wetlands Programme", additional measures will be taken to fulfill the obligation of this Convention.

Under the umbrella of this Convention, Pakistan has signed MoU for Siberian Crane Conservation and Indian Ocean and Southeast Asia (IOSEA) Marine Turtles Agreement. A new Agreement on Conservation of Houbara bustard is also being considered to be signed in future. Similarly, regional consultation for dugong conservation is under process.

Table showing listing of Falcon species

S. No	Common Name	Scientific Name	WPO/Act	CITES	CMS	IUCN Category
1.	Saker falcon	<i>Falco cherrug</i>	P	II	II	Endangered
2.	Red-Headed Merlin	<i>Falco chicquera</i>	P	II	II	LC
3.	Merlin	<i>Falco columbarius</i>	P	II	II	LC
4.	Sooty Falcon	<i>Falco concolor</i>	P	II	II	LC
5.	Lagger Falcon	<i>Falco jugger</i>	P	I	II	Near threatened
6.	Lesser Kestrel	<i>Falco naumanni</i>	P	II	II	Vulnerable
7.	Redcapped/Barbary Falcon	<i>Falco pelegrinoides</i>	P	I	II	LC
8.	Peregrine Falcon	<i>Falco peregrinus</i>	P	I	II	LC
9.	Northern Hobby	<i>Falco subbuteo</i>	P	II	II	LC
10.	Common/Eurasian Kestrel	<i>Falco tinnunculus</i>	P	II	II	LC

P – (Protected), LC – (Least concerned)

As listed in the above table, all the species of falcons are listed protected in the Provincial Wildlife Acts except in Punjab Wildlife Act. Whereas these falcons are listed in CMS Appendix-II. The Lagger falcon, Red Capped/Barbary falcon and Peregrine falcon are placed in the appendix-I of the CITES list, i.e. highly protected. In the IUCN categorization Saker falcon is listed as Endangered, Lagger falcon is threatened, lesser Kestrel vulnerable while the rest of the species were listed as of least concerned.

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