

**Department of Wildlife Protection
Govt. of Jammu & Kashmir**



**An overview
2001-2010**

I N D E X

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Mian Altaf Ahmad



Message

Jammu and Kashmir State is endowed with a rich biodiversity and varied ecosystems. Our cold deserts, snow bound alpine areas, extensive forests, meadows, wetlands and lakes support a variety of flora and fauna. The mounting pressures of development and decimation in forest cover have had adverse impact on the wildlife. We must strive hard to protect our forests and the wildlife for their sustainable use.

This gives me immense pleasure to know that the state department of wildlife protection is bringing out an "Overview" of the department of the last one decade in the form of book. I am sure that this book will help in educating the general public about the importance of wildlife conservation and its long term impact on human environment and livelihood.


(Mian Altaf Ahmad)

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Shantmanu, IAS

Commissioner/Secretary to Govt
Forest Department, J&K

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D. O No.....

Dated.....



MESSAGE

Wildlife is a crucial natural resource and its role in the very survival of man on earth has never been understood as well as it is done today. With rapid urbanisation, industrialisation and other developmental activities, the nature is disturbed a lot, by way of degradation of environment and dwindling forest and wildlife. Conservation of these precious natural resources is a priority and we need to mainstream it in our state's development planning.

The Department of Wildlife Protection has done well to bring an "Overview" of the department for last one decade in the form of a book. Our national parks, sanctuaries and conservation reserves are important repositories of biodiversity. We have excellent forest areas which have not been notified as Wildlife Reserves but they support a wide variety of precious wildlife. Conservation of Wildlife in the forest area or outside the forest area requires the support and participation of people from all walks of life.

I hope this book shall serve a great deal in creating awareness among different sections of the society and for conservation of wildlife and its habitat.


(Shantmanu)



**Chief Wildlife Warden
Jammu & Kashmir Government**



P R E F A C E

Jammu and Kashmir State has a unique landscape with contrasting biodiversity that crowns the sub continent. The snow clad mountains of Ladakh, moderate Mediterranean Kashmir valley and sub tropical areas of Jammu present great variation in altitude and climate and hence gives rise to diversity in life forms. There is a rich history of Protected Areas in the state which represent floral, faunal, geographical diversity of the State and are essentially a management tool aiming at nature conservation simultaneously providing range of ecological, social, cultural, economic and spiritual benefits. These Protected Areas also serve ecosystem services, and to enhance local benefits they need to be integrated in the management of the surrounding landscape.

With the depletion of natural resources, the hitherto ignored concepts of biodiversity conservation, effects of climate change, range of intangible ecosystems services provided by natural resources are gaining ground in this Century. Conservation of this biodiversity is the principal responsibility of Jammu and Kashmir Wildlife Protection Department. Wildlife Conservation at present is facing lots of challenges and needs to be addressed with people's participation

The Wildlife Department has not brought out any technical report for past many years and it was considered necessary to bring out an analysis of the working of the department in the first decade of the century. An attempt

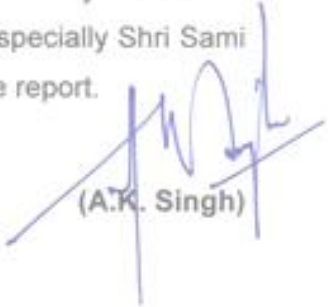
has been made to throw light on the origin, legal frame work, mandate, major achievements and also the problems being faced by the Department in achieving the goal of conservation. The challenges and opportunities before the Department have also been listed for future guidance.

I wish to put on record the contribution made by the officers of the department in conceiving the idea and providing input for the report in short span of time after I took over.

I appreciate the efforts and painstaking work done by Mrs. Ifshan Dewan, the then Wildlife Warden, Technical in collecting, collating and compiling the information and making the publication of this report possible.

The architect of this report has been Shri Deepak Khanna, IFS Additional Principal Chief Conservator of Forests, who has given shape to the ideas generated in the in-house discussion about the report. But for his active involvement and contribution this report would not have been possible.

The contribution made by Shri M. A. Parsa, the then Wildlife Warden Headquarters and Shri R. Y. Naqash, the then Wildlife Warden, Central Division, Srinagar by way of suggestions for improvement are duly acknowledge. Shri Tahir Mirza, Wildlife Prosecutor made valuable contribution in the chapter dealing with legal matters. The hard work put in by the staff in the head office of the Department is dully acknowledged especially Shri Sami Ullah and Hilal Ahmad Shah in formatting and designing the report.



(A.K. Singh)

Chapter – I

INTRODUCTION

The Protection and Preservation of Wildlife has been an important component in the management of natural resources in the State of Jammu and Kashmir. The today's Wildlife Department has its origin in the Game Preservation Department which was established in 1901 AD with the aim to preserve wild animals and birds for royal recreation and sport. The State was among the first few States which took steps to consolidate the law relating to Protection and Preservation of the Game in the State through enactment of the Jammu and Kashmir Game Preservation Act 1942 A.D. under Act No. XXIV of 1998 (Bikrami), and under the provisions of the Act a number of areas were declared as Game Sanctuaries, Game Reserves and Reserved Areas (**Annexure – I**). However, there was no scientific management. For the purposes of carrying out the provisions of the Act, the rules were provided for appointment of Game Wardens. The hunting rules were made more strict and punishment for wildlife related offences was made more severe.

In the year 1978, the Jammu and Kashmir Wildlife (Protection) Act was promulgated on 9th May, 1978 largely modeled on the Central Protection Act, 1972. The “Game” word was replaced by “Wildlife” in 1978. The Act provided for constitution of National Parks, Sanctuaries, Game Reserves and Closed Areas. Hunting for wildlife was regulated through licences. In order to carry out the provisions of the Jammu and Kashmir Wildlife (Protection) Act 1978, the Government in 1981 vide Government Order No. 20-FST of 1981 dated 04.02.1981 consolidated some of the existing Game Sanctuaries and Game Reserves into National Parks, Sanctuaries and Game Reserves besides bringing some new areas under the Wildlife Conservation movement through Cabinet decision No. 35 of 2nd February, 1981 (**Annexure-II**). The Government order notified three (3) National Parks and five (5) Wildlife Sanctuaries. Later some other areas were notified as part of consolidation and strengthening exercise for having a good Protected Area Network.

The 1978 Act did not envisage total ban on the killing of wild animals. Controlled hunting of big and small wild animals of many species was permitted under the license of Department mainly for game purposes.

The Wildlife Wing existed as Game Preservation Wing in the Forest Department of Jammu and Kashmir till 1979. In 1979, a Directorate of Wildlife Protection came into existence vide Government Order No. 132-FST of 1979 dated 13.08.1979 (**Annexure-III**).

The present strength of the Department as per SRO 469 dated 21-11- 1985, SRO 158 dated 12-08-1994 and G.O. No. 32 - FST 2008 dated 16-01-2009 (**Annexure – IV**)

Over a time period of time, the wildlife hunting as a game changed into organized trade for meeting requirements of various products at domestic and international markets which resulted into the considerable reduction of wild animal population in wilderness.

The J&K Wildlife Protection Department as it exists now came into existence into the year 1982 and has been responsible for management and maintenance of various Protected Areas of the State.

Biodiversity Conservation became the focus of interest following U.N. Convention on Biodiversity in the Earth Summit at Rio De Janeiro in 1992 and the Convention on International Trade on Endangered Species of Flora and Fauna (CITES) on ban on trade in animal articles and trophies. The State's continuing provisions on hunting and trade of animal articles were in conflict with the changed scenario. These conflicts were addressed by amending the J&K Wildlife Protection Act 1978 on 6th May, 2002. The amended Act provided for a complete ban on hunting except under special circumstances. More endangered species were

brought to the Schedule-1 of the Act in order to afford them utmost protection. Besides important wildlife plants were brought under the purview of the Act.

The Jammu and Kashmir State Forest Policy of 2010, with regard to wildlife Conservation, identifies main reasons of habitat destruction and disturbances as reasons for decline in populations and man wild animal conflict. It also resolves that Forest Management outside Protected Areas shall focus on Habitat Conservation and Management of Wildlife. The human activities in the core habitat of important wildlife species are required to be restricted to cause minimum disturbances to wild animals.

The Forest Policy also provides that Protected Areas, being repository of biodiversity and gene-pool, shall receive utmost attention for conservation through improved management plans and techniques. Also the Zoological Parks and Animal Rescue Centers shall be developed for wildlife education, awareness and special attention shall be made to address the man wild animal interface through better coordination between the stakeholders.

Chapter - II

LEGAL FRAME WORK

The Jammu and Kashmir Game and Preservation Act, 1942 got assent of His Highness The Maharaja Bahadur on 15th January 1942 and published in Government Gazette on 24th Magh, 1998 (1942 A.D.). The main objective of the Act was to amend and consolidate the law relating to the protection and preservation of the Game in the Jammu and Kashmir State along with the other features as under:

- Consolidating of laws and edicts of Maharaja into a single piece of legislation;
- Providing for declaration of Game Sanctuaries, Game Reserves and Reserved Area;
- Restriction of certain Acts subject to permission and hunting in Game Reserves.

In this Act, hunting of wild animals, grazing in the Game Reserves and Reserved Areas was allowed seasonally or closed. However, uncontrolled hunting of the wild animals, as elsewhere, after independence became a trade to meet out the domestic needs and ultimately some of the species came to be on the verge of extinction. The uncontrolled grazing resulted into massive habitat destruction which was very important from wildlife conservation point of view.

The need was felt to have a new piece of legislation. The Jammu and Kashmir Game and Preservation Act, 1942 was repealed and the **Jammu and Kashmir Wildlife (Protection) Act, 1978** was enacted. The Act provided for appointment of Chief Wildlife Warden, Regional Wildlife Wardens and Wildlife Wardens, constitution of Wildlife Advisory Board, regulated hunting, declaration of areas into Sanctuaries, National Parks, Game Reserves and Closed Areas, determination of rights and extinguishment thereof wherever required particularly in National Parks regulating trade and commerce in Wildlife Animals, articles & trophies apart from saving provisions of the previous Act.

The 1978 Act did not envisage total ban on the killing of wild animals. Controlled hunting of big and small wild animals of many species was permitted under licence from Department mainly for game purposes.

The International Conventions particularly CITES (Convention on International Trade on Endangered Species of Flora and Fauna) and U.N. Convention on Biodiversity Conservation in the Earth Summit at Rio De Janeiro in 1992 has led to amendment of the Jammu and Kashmir Wildlife Protection Act in 2002. The Act now provides a complete ban on hunting except under special circumstances. More endangered species of wild animals have been brought to the Schedule-1 of the Act to afford them utmost protection. Besides important wildlife plants have been brought under the purview of the Act. Almost all the provisions of the amended Act has been brought at par with the provisions of Central Wildlife Act, 1972.

The significant amendments in the principal Act that were made in 2002 pertain to:

- a. Constitution of State Board for Wildlife under the Hon'ble Chief Minister;
- b. Total ban on hunting except in certain cases;
- c. Permission for tranquilizing and translocation of wild animals;
- d. A new chapter on 116 specified plants including important medicinal plants;
- e. Cultivation of specified plants without licence prohibited;
- f. Declaration of Game Reserves, Wetland Reserves, Chakore Reserves and Closed Areas as Conservation Reserves;
- g. A new chapter added on management and recognition of Zoos and Deer Parks;
- h. Ban on trade of wildlife, related articles and declaration of inventories (individual / company) thereof;
- i. Punishment made more stringent with imprisonment upto seven years and increased penalties.

Since 1996, the Protected Area Management is being governed by the Hon'ble Supreme Court of India through different directions given in the writ petition No. 202 of 1995 titled T. N. Godhavarman Vs Union of India and others and 337/1995 titled Centre for Environmental Law WWF- India Vs Union of India and others.

Not only the Protected Areas but the areas around National Parks and Sanctuaries have been required to be managed as Eco Sensitive Areas with appropriate regulatory mechanisms in pursuance of the National Wildlife Action Plan approved by the National Board for Wildlife under the Chairmanship of Hon'ble Prime Minister. It provides that all identified areas around protected areas and wildlife corridors shall be declared as Ecologically Fragile under the Environment Protection Act 1986. The directions of the Hon'ble Supreme Court in OWP No. 460/2004 titled Goa Foundation Vs Union of India and Others mainly pertains to regulation of activities around Protected Areas as these areas could serve as 'shock absorbers' of human activities on environment. The activities needing environmental clearance are now required to be referred to the National Board for Wildlife for wildlife clearance in a distance upto 10 km of the boundary of the protected area till a proposal of the Eco Sensitive Zone is notified or finalized by the Government.

Apart from the aforementioned acts and orders, the Biodiversity Act of 2002, J&K Forest Conservation Act 1997, J&K Forest Protection Force Act 2001 and Environmental Protection Act 1986 are also relevant to Wildlife management.

Determination of Rights:

The provisions of Jammu and Kashmir Wildlife (Protection) Act 1978 lay down detailed procedure for notification of National Parks and Wildlife Sanctuaries and Determination of Rights of any persons in or over the land within the limits of such National Parks or Sanctuaries. Briefly, after the Government by Notification under section 17 (in case of Sanctuary) and section 35 (in case of National Park)

declares its intention to constitute any area as a Sanctuary or National Park, the collector has to invite objections from the people claiming any right by issuing proclamation under section 20. Thereafter the collector has to expeditiously enquire into the claims preferred and pass appropriate orders. In certain cases, the Collector is also required to take up acquisition proceedings. After the claims preferred have been disposed of and the rights have been settled, a final notification is to be issued under section 25-A (in case of Sanctuary) and section 35 (in case of National Parks) specifying the limits of the area within Sanctuary or the National Park.

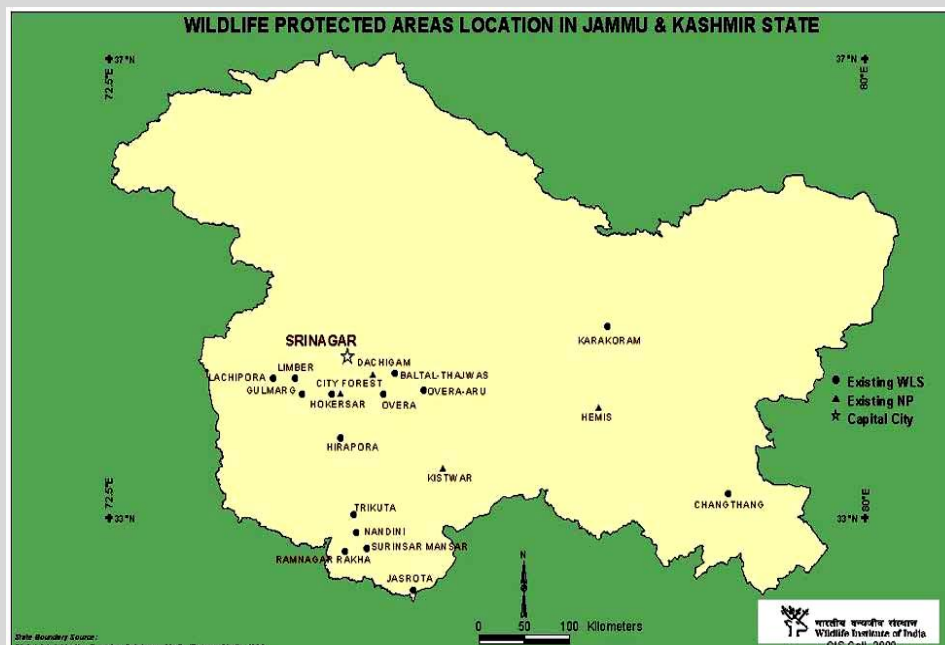
In a Public Interest Litigation pertaining to the management of Protected Areas the Hon'ble Supreme Court while directing that other provisions of the Wildlife Protection Act were required to be carried out as per law, also directed that the issues of determination of rights in Sanctuaries and National Parks and extinguishment thereof wherever necessary has remained pending for a very long time and necessary processes were required to be completed as per law in the interest of wildlife conservation.

The Hon'ble Supreme Court of India vide its order dated 23.11.2005 and 29.08.2006 passed in Writ Petition Civil No. 337/1995 in case titled Centre for Environmental Law WWF Vs Union of India and others took a serious view on Determination of Rights of the people within the limits of National Parks and Sanctuaries and directed the States to expedite and complete the process as early as possible.

In compliance to the Hon'ble High Court's orders mentioned above, the Government of Jammu and Kashmir, through Revenue Department, issued SRO-125 dated 05.04.2007 where-under the Assistant Commissioner, Revenue has been appointed as Collector under Section 17-A of the J&K Wildlife (Protection) Act for determination of existence, nature and extent of rights of any person in or over the land comprised within the limits of Sanctuaries / National Parks.

The Government has so far issued the notifications under Section 17 and Section 35 for Five (5) National Parks and Fourteen (14) Wildlife Sanctuaries. Proclamations under Section 20 have also been issued by the Collectors in respect of these National Parks and Sanctuaries. However, due to want of finalization of the enquiry by the Assistant Collectors (Revenue) with regard to the claims and settlement of Rights, the final Notification has been issued in respect of only one Salim Ali National Park, Srinagar and the case of the Jasrota Wildlife Sanctuary, Jammu has been submitted to the Government for final orders after due verification on the basis of inquiry report submitted by the concerned Assistant Commissioner Revenue (Collector). The Department has the onerous task of getting the process completed in the shortest possible time to comply with the directions of Hon'ble Supreme Court and provisions of Wildlife Protection Act, 1978 for which the support of the Revenue Department is essential.

This process has been pending for a very long time and it is not only hampering the management of protected area network but also the development works around protected areas because of indecision with regard to realignment of boundaries of Protected Areas, issues related to identification of critical wildlife habitats and relocation of people wherever feasible in the interest of wildlife protection.



Map showing Protected Area Network in Jammu and Kashmir State

The present status in respect of National Parks and Sanctuaries is as under:

S. No	Name of the Protected Area	District	Status of the Area	PA falls under the jurisdiction of WLW	Area in sq. km.
1	Dachigam National Park	Srinagar/ Pulwama	National Park	Central / Anantnag	141.00
2	City Forest National Park	Srinagar	do	Central	9.07
3	Hemis National Park	Leh	do	Leh	3350.00
4	Kishtwar National Park	Kishtwar / Doda	do	Chenab	425.00
5	Kazinag National Park	Baramulla	do	North	89.00
1	Gulmarg Wildlife Sanctuary	Baramulla	Wildlife Sanctuary	North	180.00
2	Limber Wildlife Sanctuary	Baramulla	do	North	26.00
3	Lachipora Wildlife Sanctuary	Baramulla	do	North	80.00
4	Overa - Aru Wildlife Sanctuary	Anantnag	do	Anantnag	425.00
5	Hirpora Wildlife Sanctuary	Shopian	do	Shopian	341.25
6	Rajparian (Daksum) Wildlife Sanctuary	Anantnag	do	Anantnag	20.00
7	Karakoram Wildlife Sanctuary	Leh	do	Leh	5000.00
8	Changthang Wildlife Sanctuary	Leh	do	Leh	4000.00
9	Ramnagar Wildlife Sanctuary	Jammu	do	Jammu	31.50
10	Jasrota Wildlife Sanctuary	Kathua	do	Jammu	10.04
11	Surinsar Mansar Sanctuary	Udhampur/ Samba/ Jammu	do	Jammu	97.82
12	Nandni Wildlife Sanctuary	Jammu	do	Jammu	33.34
13	Thajwas (Baltal) Wildlife Sanctuary	Ganderbal	do	Central	203.00
14	Trikuta Wildlife Sanctuary	Reasi	do	Jammu	31.77

Table - 1: showing list of National Parks and Sanctuaries in the State of J&K

The status in respect of Conservation Reserves is provided in the below mentioned table:

S. No	Name of the Protected Area	District	Status of the Area	PA falls under the jurisdiction of WLW	Area in sq. km.
1	Khiram	Anantnag	Conservation Reserve	Anantnag	15.75
2	Panyar	Pulwama	do	Shopian	10.00
3	Khangund	Pulwama	do	Anantnag	15.00
4	Shikargah	Pulwama	do	Shopian	15.50
5	Khrew	Pulwama	do	Central	50.25
6	Khonmoh	Pulwama	do	Central	67.00
7	Brain Nishat	Srinagar	do	Central	15.75
8	Khimber / Dara / Sharazbal	Srinagar	do	Central	34.00
9	Wangat / Chatergul	Ganderbal	do	Central	12.00
10	Zaloor Haaran	Kupwara	do	North	25.25
11	Achhabal	Anantnag	do	Anantnag	20.00
12	Ajas	Bandipora	do	North	48.00
13	Naganari	Baramulla	do	North	22.25
14	Sudhmahadev	Udhampur	do	Jammu	142.25
15	Jawahar Tunnel	Kulgam / Ramban	do	Chenab / Anantnag	18.00
16	Thein	Kathua	do	Jammu	19.00
17	Bahu	Jammu	do	Jammu	19.75
18	Sabu	Kargil	do	Leh	15.00
19	Boodh Karbu	Kargil	do	Leh	12.00
20	Kanji	Kargil	do	Leh	100.00
21	Shang	Leh	Do	Leh	Part of Hemis National Park
22	Hokera (Ramsar Site)	Srinagar	Wetland Reserve	Wetlands Kashmir	13.75
23	Mirgund	Baramulla	do	Wetlands Kashmir	4.00
24	Shallabugh	Ganderbal	do	Wetlands Kashmir	16.00
25	Hygam	Baramulla	do	Wetlands Kashmir	7.25
26	Malgam	Bandipora	do	Wetlands Kashmir	4.50
27	Pampur (Chatlam) / Manibugh / Kranchoo / Chandhara	Pulwama	do	Wetlands Kashmir	0.25 / 0.25 / - / -
28	Gharana	Jammu	do	Jammu	0.75
29	Pargwal	Jammu	do	Jammu	49.25
30	Kukarian	Jammu	do	Jammu	24.23
31	Nanga	Jammu	do	Jammu	15.25
32	Sangral - Asa Chak	Jammu	do	Jammu	7.00
33	Tsomoriri (Ramsar Site)	Leh	do	Leh	Part of Changthang WLS
34	Norrchain (Tsokar Wetland)	Leh	do	Leh	Part of Changthang WLS
35	Hanley / Chushul Marshes	Leh	do	Leh	Part of Changthang WLS

Table - 2: showing list of Conservation Reserves in the State of J&K

Chapter - III

Mandate of the Wildlife Protection Department

The term “wildlife” encompasses all uncultivated flora and undomesticated fauna. Every species has the right to live and every threatened species must be protected to prevent its extinction. This concept is in line with world conservation strategy. Wildlife Conservation is thus synonymous with living resource conservation, which not only involves conservation of wild birds and animals but also of micro-organisms and non-living elements in the environment on which they depend. Wildlife Conservation, in this sense is a concept of management of natural eco-systems of the world.

Assigning conservation a high priority at the highest level is an imperative. Its integration in all development programmes, evolving appropriate funding mechanism, enhancement of financial allocations and provision of adequate personnel with requisite expertise is required to be ensured, to arrest the ongoing trend of degradation and to restore wildlife and its habitat.

At present the State does not have its own State Wildlife Action Plan and the National Wildlife Action Plan 2002-2016 has been the guiding document for the State for deciding the strategies and future actions for the management and conservation of wildlife in the State.

Strengthening and enhancing the Protected Area Network:

Prior to 1978 the main thrust for conservation of wildlife remained in Kashmir Valley alone as there existed 16 Protected Areas only encompassing an area of 516.00 sq km. In order to bring respective species and communities of other provinces under the purview of wildlife conservation, an adequate network of potentially viable wildlife habitats in all the three regions of the State was identified.

The Government in 1981 vide order No. 20-FST of 1981 dated 04.02.1981 consolidated the some of the existing Game Sanctuaries and Game Reserves into National Parks, Sanctuaries and Game Reserves besides bringing some new areas under the Wildlife Conservation through Cabinet decision No. 35 of 2nd February, 1981. The Government order notified three (3) National Parks and five (5) Wildlife Sanctuaries. Later some other areas, which included 2 National Parks and 9 Sanctuaries, were notified, as part of consolidation and strengthening exercise for having a good Protected Area Network.

The State Government has so far notified 15912 sq km under the Protected Area Network (PAN) which is 15.59% of the total geographical area of the State comprising 5 National Parks, 14 Wildlife Sanctuaries and 35 Conservation Reserves. The Protected Areas (PAs) includes 2762 sq km (12.76% of the forest area, out of 20230 sq km of total forest area) and the remaining area of 13150 sq km is High Altitude Cold Desert Area of Ladakh. The extent of areas under Protected Area Network (PAN) is required to be validated using Geographical information System (GIS).

In Kashmir valley a number of conservation reserves exist particularly around Dachigam National Park and Overa-Aru Wildlife Sanctuary which act as buffer zones to the Sanctuary and National Park. In Jammu province, however a number of Conservation Reserves exist as isolated patches. These are required to be consolidated into viable Protected Areas particularly where they can serve as corridors or to be developed as Nature Parks depending on their location. Further opportunities exist in Rajouri and Poonch Districts where rich wildlife areas in Pir Panjal Range can be established that provide a landscape approach to management of wildlife areas particularly in the vicinity of Hirpora Wildlife Sanctuary in Shopian District in the Pir Panjal ranges. A proposal stands submitted to the Government since 1997 to declare identified areas as Protected Areas. These areas can now be taken as part of further rationalization and consolidation of the

State's Protected Area. Similar exercise has also been undertaken in Kargil District where more Protected Areas can be notified.

However the present policy of the Government is on consolidation of Protected Areas rather creating new ones keeping in view the restraints it causes on people. Their constitution should also be a voluntary conservation effort on the part of people.

Effective management of Protected Areas:

The basic requirement of free play of ecological forces is essential in the management of Protected Areas. Most of these areas should serve as control areas purely for research and biodiversity conservation and serve as gene pool for future generations apart from providing extremely important ecosystem services. These can be carried out effectively through management plans which can provide for the basic necessities that are required by host of species for its conservation, procreation and development with minimal activity of human beings voluntarily. It therefore becomes important the developmental activities should be designed and finalized in such a manner so as to supplement the basic requirement of a particular species or a group of species in a particular area. As different species have different habitats, which in turn have different specific requirements, it is necessary that the activities designed for a particular area are prioritized keeping the requirement of the prominent key species in mind. The activities thus designed should ultimately aim at management of the habitat in a particular manner so as to create reasonable and adequate provisions for food, shelter, water and breeding ground for a particular area. Thus provision of adequate water points, supplementing of existing breeding grounds and providing adequate shelter at different points uniformly spread over a large area should form the core of any developmental plan designed for a particular area. These sites should also provide for free play of natural forces.

It is mandated that each Protected Area should have a management plan, based on sound scientific and ecological data. In order to manage the Protected Areas as per the provisions of J&K WLP Act, 1978 and as per the directives of Hon'ble Supreme Court Orders, the department has initiated the process of preparation of Management Plans of Protected Areas with reputed consultants as well as by itself. The Management Plan for two Protected Areas namely Hemis and Kishtwar High Altitude National Parks exist at present while the management plan for Dachigam National park is in formulation.

The Department intends to put in place a formal structure for approving the management plans which will include different stakeholders particularly the local communities, Panchayats, people's representatives, other Government Departments and members from civil society.

Conservation of Wild and Endangered Species and their Habitats:

Over the years, due to numerous reasons, several species and their habitats have become critically endangered. Snow leopard, Hangul, Himalayan Tahr, Markhor, Musk deer, Tibetan Gazelle are some of the examples of this.

In the State, three endangered species namely Hangul, Markhor and Snow leopard have been brought under the purview of Species Recovery Programme. Of these the funding of species recovery programme for Hangul and Snow leopard is being carried out under the Centrally Sponsored Scheme "Integrated Development of Wildlife Habitats" and species recovery programme of Markhor is being carried out "Compensatory Afforestation Management and Planning Authority (CAMPA)".

Species Recovery Programme for Hangul (*Cervus elaphus hanglu*):

A long term **Hangul Conservation Action Plan** prepared on technical assistance from the Wildlife Institute of India, Dehradun, has been approved and included in the list of species under the Species Recovery Programme being funded through the umbrella scheme "Integrated Development of Wildlife Habitats".

The action plan was initiated in the year 2008-2009. The implementation of the Project will give an opportunity for the conservation of this unique species along with the rich biodiversity in the Dachigam National Park and other habitats of the Hangul.

The major concern in the action plan is the decline in the population of the species and significant decrease in female and fawn ratio. Such a low population is at a high risk of extinction due to confinement and inbreeding. Available information also indicates that there is high leopard predation of the species putting this species in critically endangered category.



Hangul in Dachigam National Park

The focus of the plan is the recovery of the declining Hangul population from existing endangered status. Under this broad aim the plan has following specific objectives:

- i. To improve the recruitment in the adult population;
- ii. To restore the shrinking habitat range of species.

The action plan aims at four major outcomes for the conservation of the species:

- a. Improved survival rate of the young fawns so as to ensure their recruitment into adult population;
- b. Reduction of disturbance in the summer habitat range of the species so that the animals could use wider range of habitat, particularly during breeding season;
- c. The identification and prioritization of relic habitats based on their ecological status / suitability and connectivity with the existing habitat of Dachigam NP;
- d. Operational awareness programmes for different stakeholders concerning conservation of this species.

Given the ground position, a Long term Conservation of Hangul would require active involvement of local communities, landscape level conservation, capacity building of staff, research, adaptive management of the project, developing grazing grounds, Conservation Breeding centers both in-situ and ex-situ and management policies along with promotion of conservation and education awareness initiatives etc.

The operationalisation of the Hangul Conservation Action Plan Project in the State of Jammu and Kashmir will give an opportunity for the conservation of this unique species along with the rich biodiversity of the inhabiting habitats and will also address livelihood issues related to the local people.

Conservation Breeding Centre for Hangul:

Under the long term Hangul Conservation Programme, a significant component is to hold a stock of scientifically managed Hangul in captivity for experimental release at sites identified through surveys. In this behalf, Shikargah, Tral which is a relic habitat of Hangul has been identified for ex-situ Conservation. Accordingly, a project for construction Conservation Breeding Center of Hangul at Shikargah, Tral has been taken by the Department with financial assistance of the Central Zoo Authority. For making this breeding center functional, major challenge before the Department is to use different strategies to capture Hangul, preferably fawns, from wild for breeding without major casualties.

Project Snow Leopard (*Panthera uncia*):

The Ministry of Environment & Forests has conceived the project in Trans-Himalayan region for conservation of Snow Leopard which is a globally endangered species as well as the most important flagship species of the mountain



Snow leopard

regions of J&K, HP, Uttarakhand, Sikkim and Arunachal Pradesh and is now being funded under the Species Recovery Programme of Integrated Development of Wildlife Habitats.

The aim of Project Snow Leopard is to safeguard and conserve India's unique natural heritage of high altitude prey wildlife populations and their habitats by promoting conservation through participatory policies and actions.

The actions to be taken include habitat improvement through pasture development, patrolling, camera traps, high resolution digital camera, survey and census, construction of coral pens, equipment for handling human wild animal conflicts, micro level planning, eco-development activities involving promotion of alternative livelihoods for the dependent local people, public awareness activities, compensation package for livestock depredation and crop damage etc.

The launching of the Snow Leopard Project as a species recovery programme in the State of Jammu and Kashmir marks the initiation of major Biodiversity Conservation Plan that will not be restricted to the Protected Areas (National Parks and Wildlife Sanctuaries) only but will extend over the Trans-Himalayan landscape. The project is to be implemented with the active involvement of the local communities. Implementation of the Project Snow Leopard gives an opportunity for the conservation of this unique species along with the rich biodiversity in the Himalayan and Trans Himalayan zones and will also address to several livelihood requirements of the local communities including providing them the much needed respite against the livestock damages caused by the snow leopard and the crop damages caused by its prey base species.

Markhor (*Capra falconeri*) Recovery Programme under CAMPA:

Pir Panjal Markhor is the largest wild goat in the world found in the Himalayan Biogeographic region. Markhor is found only in the State of Jammu and Kashmir and is a Schedule-I species of the Indian Wildlife Protection Act, 1972 and

the J&K Wildlife (Protection) Act, 1978 (Amended upto 2002). Its distribution is restricted to a handful of sites viz. Hirpora, Kazinag and Poonch with an estimated population of 280-330, as revealed through a joint survey conducted by the J&K Wildlife Protection Department and Wildlife Trust of India (WTI).

The State of Jammu and Kashmir is committed to conserve the endangered species and to this effect, the State Government agreed to all the recommendations laid down by the National Board for Wildlife, while considering the proposal for denotification of forest land of Hirpora Wildlife Sanctuary for construction of the Mughal Road passing through the Sanctuary. The important recommendations included constituting Kazinag National Park and significant increase in Hirpora Wildlife sanctuary by addition of more forest areas.



Markhor

The Markhor Recovery Plan for Hirpora, in Southern Kashmir, Lachipora, Limber Wildlife Sanctuaries and Kazinag National Park in North Kashmir formulated by the Wildlife Department Government of Jammu and Kashmir has been endorsed by the State Government and the Ministry of Environment & Forests. Considering all pros and cons for the survival of Markhor, the Hon'ble Supreme Court of India accorded approval to the construction of Mughal Road with conditions, which are being observed by the State Government.

The Markhor Recovery Plan provides for actions like, habitat improvement, afforestation, soil and water conservation, development of infrastructure like offices, guard huts, staff quarters, check posts, measures for mobility and communications, anti-grazing / anti-poaching activities, nature trails and inspection paths, publicity and awareness, designing Nature Interpretation Centre, eco-development activities and ecotourism etc. Regular census and survey of Markhor and important wildlife

species found in the Markhor habitats is also part of the Plan. The project has been launched in the State in 2009.

In the First meeting of the State Board for Wildlife chaired by the Hon'ble Chief Minister of the State, the matter regarding identification of Critical Wildlife Habitat including constitution and functions of expert committee, scientific information required and resettlement and matters incidental thereto was discussed and it was recommended by the Board that a State Wildlife Action Plan should be developed giving a clear road map, and resources required etc. for conservation of critically endangered species like Wild Yak, Gowa, Argali, Brown Bear, Himalayan Tahr and Western Tragopan be also included. The future actions of the Department will be to formulate State specific Wildlife Action Plan in line with National Wildlife Action Plan.

S. No.	Species	Region	Status as per IUCN's Red Data Book	Status as per Wildlife Protection Act,
1	Snow leopard	Ladakh, Kashmir & Jammu	Endangered	Schedule – I
2	Common leopard	Jammu, Kashmir & Ladakh	Near Threatened	Schedule – I / Endangered
3	Black bear	Kashmir & Jammu	Vulnerable	Schedule – II
4	Brown bear	Ladakh, Kashmir & Jammu	Least Concern	Schedule – I / Endangered
5	Ibex	Ladakh, Kashmir, Jammu	Least Concern	Schedule – I / Endangered
6	Himalayan tahr	Jammu	Near Threatened	Schedule – I / Endangered
7	Spotted deer	Jammu	Least Concern	Schedule – III
8	Barking deer	Jammu	Least Concern	Schedule – III
9	Goral	Jammu	Near Threatened	Schedule – I
10	Markhor	Kashmir & Jammu	Endangered	Schedule – I / Critically Endangered
11	Serow	Kashmir & Jammu	Near Threatened	Schedule – I / Endangered
12	Hangul	Kashmir	Least Concern	Schedule – I / Critically Endangered

13	Musk deer	Jammu, Kashmir & Ladakh	Endangered	Schedule - I / Endangered
14	Chiru (Tibetan antelope)	Ladakh	Endangered	Schedule - I / Critically Endangered
15	Tibetan gazelle	Ladakh	Near Threatened	Schedule - I / Endangered
16	Nayan (Tibetan sheep)	Ladakh	-	Schedule - I
17	Wild yak	Ladakh	Vulnerable	Schedule - I
18	Pallas cat	Ladakh	-	Schedule - I
19	Black necked crane	Ladakh	Vulnerable	Schedule - I
20	Golden eagle	Kashmir, Ladakh & Jammu	Least concern	Schedule - I / Endangered
21	Western tragopan	Kashmir & Jammu	Vulnerable	Schedule - I / Endangered
22	Cheer pheasant	Kashmir, Jammu	Vulnerable	Schedule - I / Endangered

Table - 3: showing list of important wildlife species of J&K and their Status as per IUCN's Red Data Book / J&K Wildlife Protection Act, 1978 (Amended upto 2002)

Restoration of Degraded Habitats outside Protected Areas:

The restoration and management of degraded habitats outside Protected Areas is a vital objective in order to provide sufficient habitat for spatial movement of spill-over species outside Protected Areas as well as to provide biological resources needed by the local communities to prevent their dependency on Protected Area resources. The restoration of degraded habitats outside protected area network is also crucial to the linking of Protected Areas with effective wildlife corridors to provide for genetic continuity and prevention of insular wild animal populations, wherever feasible. A study conducted by Wildlife Trust of India in 2008 points to degradation of habitats outside Protected Area Network as well as land use change in the State, during last decade as major causes for increase in man wild animal conflicts over living space and food.

In order to overcome impacts of such activities habitat improvement practices like plantations, assisted natural regeneration, raising plantation of indigenous fruit and fodder species, development of grass lands, meadows, wetlands, various soil and moisture activities, managing minor forest produce has to be initiated in these degraded habitats. However due to various reasons, the

Department is not able to restore these areas. These areas which are in the immediate vicinity of the Protected Area should focus on biodiversity conservation and improved livelihood as a strategy.

Development of Wetlands

The wetlands are among the most productive life support systems in the world and are of immense socio-economic, ecological and bio-aesthetic importance to the mankind. Wetlands are valuable as sources, sinks, transformers of a multitude of chemical, biological, and genetic materials. They are often called "biological supermarkets" for the extensive food chain and rich biodiversity they support. They play major roles in the landscape by providing unique habitats for a wide variety of flora and fauna. The State of Jammu & Kashmir is famous world over for several of its important wetlands, which are directly linked to the livelihood requirements of the local population apart from their ecological, biodiversity and tourism values. These wetlands are also primary habitat for hundreds of species of waterfowl, fish, mammals, insects etc. A variety of migratory birds from Siberia, Northern Europe and Central Asia visit these wetlands during the winter months.



Migratory birds in Hokersar Wetland

A number of wetlands exist in the State of Jammu and Kashmir some of them inside Sanctuaries and some independently as conservation reserves. So far a total of 21 wetlands have been identified. Of these, seven (7) wetlands / lakes are

within the limits of National Parks and Wildlife Sanctuaries. The prominent ones are Tso-moriri, Tsigul Tso/Tsokar and Pangong Tso in Ladakh, Surinsar-Mansar and Gharana in Jammu and Hokersar, Mirgund, Hygam and Shallabugh wetlands in Kashmir. Wular Lake, Hokersar (in Kashmir), Tso-morari (in Ladakh) and Surinsar-Mansar Wetlands (in Jammu) have been declared as Ramsar Sites under the Ramsar Convention.

S. No	Name of the Ramsar site	Area in Hectare	Date of declaration
1.	Wular lake	18900	23.03.1990
2	Tso-moriri	12000	19.08.2002
3.	Hokera Wetland	1375	08.11.2005
4.	Surinsar – Mansar	350	08.11.2005

Table - 4 : showing list of Ramsar Sites with area and date of declaration

These wetlands have been under immense pressure on account of silt deposition, human interferences like encroachments, cultivation and habitation, grazing and over extraction of fodder, fuel, fish and wicker-willow etc. The management of wetlands, therefore, has become important because many of them are being drained or encroached upon by agricultural enterprises and urban areas.



Pangong Lake in Ladakh (J&K)

The State Wildlife Protection Department is managing these through State Plan Budget and Centrally Sponsored Schemes “Conservation and Management of Wetlands”. Under the State Plan, an amount of Rs. 30-35 lakhs is being provided to this department for the management of these wetlands and the Department is able to carry out only minimal activities. Further only some wetlands are covered for financial assistance under Centrally Sponsored Schemes.

Peoples’ participation for better management of wetlands is required to be strengthened in order to save these wetlands from extinction. In this regard the Department intends to constitute Conservation Reserve Management Committees and Eco Development Committees for people’s participation in the conservation programme.

The Department has initiated the process of formulation of Management Plans of the above said wetlands with reputed / recognized consultants in the field.

Prime Ministers Reconstruction Programme:

Three Wetlands namely Tso-moriri in Ladakh and Surinsar-Mansar Lakes in Jammu and Wular Lake in Kashmir have been included under the Prime Minister’s Reconstruction Programme for financial assistance. Comprehensive Management Action Plans for these Wetlands have been formulated by the Department at a total project cost of Rs. 26.28 crores, Rs. 6.91 crores and Rs. 386.39 crores respectively and submitted to the Government of India, Ministry of Environment and Forests for financial assistance. The Management Action Plans for Tso-moriri and Surinsar-Mansar Wetlands have been considered for an amount of Rs. 4.20 crores and Rs. 3.00 crores respectively for a period five years beginning with 2008-09. The Ministry has also been requested to scaling of the allocations to achieve the objectives and targets as laid down in the MAP’s of the Wetlands. In case of Wular Lake, the department has formulated the management action plan and now Forest Department is working as a nodal agency for carrying out the conservation and management practices.

Wildlife Crime Control:

Wildlife Crime Control has become a very important activity now after the amendment of the J&K Wildlife Protection Act particularly as the State falls in the trade route from India to China. The wildlife trade is illegal, clandestine and against the provisions of International treaty obligations and has to be controlled. On its part the Government initiated a number of significant steps in order to curb illegal trade within and at the International borders.

Control on trade:

Over a period of time, the wildlife hunting as a game changed into organized trade for meeting requirements of various products at domestic and international markets. Prior to 1997, lot of uncontrolled hunting took place to meet the requirements of trade, which resulted into the considerable reduction of animal population in wilderness. The J&K State enacted the Wildlife Protection Act 1978 which did not envisage total ban on the killing of the wild animals but controlled hunting (Shikar) of animals of many species was allowed under licence. All the sections of the society, nature lovers and eminent environmentalist had been requesting for imposing complete ban. The Act of 1978 was amended on 6th May, 2002. There is complete ban not only on killing but also on trade of specified schedule animals, products, articles and trophies made therefrom or derived thereof i.e. rugs, skins and specimens of such animals wanted in whole or in part and antler, bone, shell, horn, rhinoceros horn, hair, feather, nail, tooth, tusk, musk, eggs and nests etc. To provide utmost protection some of the endangered species of animals have been brought in schedule-I from other schedules.

Ban on Shahtoosh:

The Tibetan Antelope (Chiru) is endemic to the Tibetan Plateau and is found between Ngoring Hu in China and the Ladakh region in India. Its range once extended to western Nepal and Kyrgyzstan, but none have been seen in Nepal for several years. Although India does not have native Chiru population, only small herds (200 to 250) migrate to Ladakh in Jammu & Kashmir during summers which

return to the high plains of Tibet. The habitat of Chiru in our territory is D.B.O (Dault Beigh olde) North of Ladakh in Karakoram Range and Changchenmo Valley (Hot springs) in the North - East of Ladakh. These animals were poached in Tibet, where they were skinned and the wool used to be taken to Srinagar via routes through Ladakh and Nepal.

It has been estimated that about 50,000 families in Jammu and Kashmir were traditionally involved in the shahtoosh trade or the shahtoosh shawl weaving process alone, though Pashmina, Shahmina and Jamavar were also popularly woven.



Following the ban on shahtoosh trade by Government of India vide Central Wildlife Protection Act, 1972 and its subsequent amendments, the J&K State Government also amended its Jammu and Kashmir Wildlife Protection Act, 1978 in the year 2002 by bringing the animal in schedule 1 of the Act and prohibiting use of shahtoosh wool.

A door-to-door survey and census of shahtoosh workers in Jammu and Kashmir, independently carried out by the J&K Wildlife Protection Department and some NGOs like Wildlife Trust of India (WTI) and its partner the International Fund for Animal Welfare (IFAW) in the year 1997 revealed that about 15000 workers in Srinagar were directly or indirectly involved in the weaving of shahtoosh shawls at the time of the ban. Most of these workers were aware that the use of shahtoosh wool was illegal outside the State but they continued with it as it was their only source of livelihood. The Hon'ble Supreme Court of India vide its order dated 26.11.2005 in SLP No. 12434/2003 titled Ashok Kumar Vs State of Jammu and Kashmir and other directed to the State respondents for to inform all the dealers and persons carrying on business on trade in shahtoosh to furnish a declaration in terms of section 49(B) of the J&K Wildlife (Protection) Act 1978 amended upto 2002 on or before 31 of December, 2005 to the officers authorized for the purpose of

inquiry and preparation of inventories and subsequently issuing of certificate of ownership under the provisions of J&K Wildlife Protection Act.

The Wildlife Protection Department received about 227 applications from the applicant declaring trophy, articles, products, skins derived from wild animals mainly the shahtoosh shawls made from the wool of Chiru / Tibetan antelope and after the due enquiry and inventory, sixteen (16) certificate of ownership for 483 number of items i.e. shawls, mufflers, scarves marked by way of electronic transponders and specified digital code were issued to the declarants.

Ban on specific schedule wild animal articles:

Under the provisions of Central Wildlife Protection Act 1972, complete ban has been imposed on trade in wild animals, their parts and products. However this Act was not applicable to the State of Jammu and Kashmir and “J&K Wildlife Protection Act, 1978” permitted trade in wild animals, their parts and products. This was sorted out by amending the provisions of J&K Wildlife Protection Act and bringing it at par with the provision of the Central Act even though the livelihood of the furriers (traders in fur articles) in the Kashmir Valley was at stake. Then Hon’ble Chief Minister of the State in 1997 promised to compensate those who would voluntarily abandon the fur trade due to changed scenario with regard to the protection and conservation of wild animals in the State of Jammu and Kashmir in which some of the species are at the verge of their extinction.

To inventorize and evaluate the fur stocks, the State of Jammu and Kashmir constituted a Committee vide Government order No. 407-FST of 1997 dated 09.09.1997 comprising of the following members held by the fur stock holders of the State:

- | | |
|--|----------|
| 1. Chief Wildlife Warden J&K | Chairman |
| 2. Financial Advisor & Chief Accounts Officer
Forest Department | Member |
| 3. Mohd Ashraf Lilly, General Secretary,
All Kashmir Leather Fur Manufacturers
Tanners & Dyers Association (<i>Regd</i>) | Member |

- | | |
|--|------------------|
| 4. An expert to be nominated by
Government of India,
Ministry of Environment & Forests | Member |
| 5. Veterinary / Fur Officer | Member Secretary |

The Committee conducted various public hearings, door to door surveys and inventoried and evaluated the fur stocks in shortest period of time stated from 23rd September, 1997 and completed on 15th October, 1997 and submitted its report to the Government pertaining to fur stocks of 224 furriers in the year 1997.

The case for the compensation and rehabilitation of people involved in this trade was taken up by the State Government with the Government of India through Ministry of Environment and Forests. After series of correspondence on the subject between the successive State Governments and the Government of India, a decision was taken for making payment of compensation to the furriers and artisans.



The Wildlife Protection Department has paid compensation to the 216 furriers from 2006 to 2009 against the fur inventoried and evaluated by the Committee and the fur so received from the fur stock holders was burnt to ashes in presence of the representative from various authorities including judiciary, police, NGO and media. This has been a very significant moment in the history of conservation of Wildlife. The rehabilitation of artisans is also under examination and is being monitored regularly by Hon'ble High Court, J&K.

Poaching:

To accord utmost protection to the specified schedule animals anti-poaching squads have been constituted, control rooms have been established at the Divisional Office level, awareness campaign in and outside the protected areas are being organized, and also regular patrolling is being carried out by the supervisory

staff and surprise visit by the officers are being conducted. However, given the sensitive nature of the task and the present status of the organization much more needs to be done.

	Hunting	Others
Total	8 (7 Leopards and 1 Peacock)	3 (1 Black bear and 2 Jungle cats Electrocutted)

Table - 5 : showing details of poaching of wild animals reported in the State w.e.f. 2005 to 2010-11

Monitoring and Research:

Monitoring and research are tools for a better understanding of nature, its functions are to enable optimum or sustainable utilization of its resources, as well as to evaluate the conservation status of species and habitats and the extent of impact of conservation endeavours undertaken. Such understanding will also help reduce man wild animal conflicts.

There is a marked deficiency in baseline biological data and on information needed to manage and monitor Protected Areas. Further there is no research wing in the Department and proper networking is required between the research institutions / universities. The department considers it necessary to have research projects over more Protected Areas rather than few preferred ones by the scientific institutions and universities so that important inputs can be obtained for scientific management of the protected areas. Draft guidelines have been prepared by the Department on the analogy of guidelines issued by the Ministry of Environment and Forests, Government of India to facilitate processing and grant of permission for carrying out research in Protected Areas and have been approved by the State Government (**Annexure-V**).

The Department has also initiated Wildlife Health Monitoring Surveys in Protected Areas of J&K State to identify the current health status of wild animal and to identify key threats to different wildlife species in and around Wildlife Protected Areas. The health status of wild animals in captivity is also being monitored by the Department. Preliminary surveys have been made in Kashmir valley during the year

2010. However extensive surveys need to be conducted in order to assess the Health Status of the Wild Animals. Further vaccination of the domestic livestock in and around Protected Area Network is required to be carried out by the Department in collaboration with Animal and Sheep Husbandry Department.

Census, Survey and Health Monitoring requires proper funding and manpower. Only meager funds are available to the Department for these activities. With these limited manpower and funding, the Department has been conducting periodic census operations of Hangul and census of some species in Protected Areas to the best possible extent. The scientific methodology of monitoring Hangul has been standardized with the assistance of Wildlife Institute India and more parameters has been included not only to estimate the population of Hangul not only quantitatively but qualitatively as well. This census of Hangul is carried out being biennially. Similar exercise needs to be built in as regular activity of the Department for other species particularly endangered.

The check list of the birds of the State of Jammu and Kashmir is placed as **Annexure-VI**.

Common Leopard & Black Bears:

The Department conducted preliminary surveys of Common leopard and Black bear - the problem animals involved in conflict through Wildlife SOS in North, South and Central Divisions of Kashmir during the year 2008 on chosen study sites.



Common leopard



Black bear

The highest encounter rates for Black bears have been found in Limber and Lachipora Wildlife Sanctuaries (3.75/km) and in case of Leopards in Handwara Forest Range (1.17/km) in North Division, Sopore. In case of Central Division, out of the four study sites, highest encounter rate for Black bears (1.5/km) as well as Leopards (0.6/km) have been found in Khrew- Khonmoh Conservation Reserve. In case of South Division, out of the six study sites, highest encounter rate for Black bears have been found in Aishmuqam Forest Range (3/km) and in case of Leopards highest encounter rate has been observed in Kulgam Forest Range (0.18/km). The complete census of Black bear and Common leopard needs to be conducted in all over the State to know the trend of the species. This is probably the first base line data which has emerged in some sensitive selected pockets of the State. A project proposal has been formulated by the Department which is prepared to be carried out with technical collaboration of Wildlife Institute of India.

Census of Hangul:

The Wildlife Department in collaboration with the Wildlife Institute of India has been regularly monitoring the Hangul population in Dachigam National Park based on sound methodology since 2004 and its adjoining areas. The census is conducted by involving the researchers, university students and the NGOs as the animal is



Herd of Hangul in Reshwadri, Dachigam National Park

critically endangered and is also the State Animal. The Hangul census is being carried every two years. Since 2006, important parameters like male:female ratio, female:fawn ratio have also been incorporated in the census methodology in order to monitor population minutely so that steps can be taken accordingly for improvement of the species.

Population trend:

In the beginning of 1900's, Hangul population was believed to be about 3,000-5,000 which had shrunk to about 1,000-2,000 in 1947 and subsequently as low as 180-250 in 1965 (Gee 1965). The number of Hangul estimated in November 1969 in Dachigam was approximately 150-200 (Holloway and Schaller 1970).



According to Holloway (1970), the total number of Hangul of the Dachigam population was 140-170 individuals in February 1970. Population estimations carried out in winter 1976-77 and in April 1977 estimated the Dachigam population at about 250 individuals, an increase of 25% from 1975 (Kurt 1978). This conclusion was attributed to the fact that poaching had been largely contained with the assistance of Indian Armed Forces (Kurt 1978). After the 1980's the population of Hangul showed marked fluctuations, a reflection of either true population fluctuations or inadequacies in population estimations carried out.

Year	1982	1992	1994	1995	1997	2000	2002	2003
Estimated Numbers	391	120-140	170-200	290	373	350-470	375-500	170-195

Table - 6 : showing population estimation of Hangul from 1982 to 2003

Since 2004 Department of Wildlife Protection in collaboration with the Wildlife Institute of India (WII) and through involvement of researchers, university students and the NGOs have been regularly monitoring the Hangul population in Dachigam National Park and its adjoining areas,

Year	2004	2006	2008	2009
Estimated average	197	153	127	175

Table -7 : showing population estimation of Hangul from 2004 to 2009 in Dachigam National Park

The recent Hangul population estimation was conducted in March, 2011 in Dachigam and its adjoining areas. The census report of Wildlife Institute of India has indicated a positive trend in its population, age group and sex ratio. The estimated average population during March, 2011 was put at 218 ± 13 .

Census of Markhor:

The census of Markhor is not carried out regularly. However, a rapid assessment for Pir Panjal Markhor was made by the Department in collaboration with Wildlife Trust of India and Nature Conservation Foundation, Mysore. An estimated population of 280-330 were assessed in overall survey blocks, out of which (180-200) was assessed in Kazinag and (40-50) in Hirpora during the year 2004-05. Thus some base data is available now. The census of this species is required to be made a regular feature.



Estimation of Tibetan Antelope:

The survey of Tibetan Antelope (Chiru) was conducted by the Department in Chanchenmo valley and Dulatbeg Oldi (DBO) in Ladakh region during the year 2007. As per the report a total of 320 Chiru (272 from DBO and rest from Changchinmo valley) were observed. Further it also reports existence of a total of 45 Blue Sheep, 73 Kiang (Wild Ass), 42 Tibetan Argali (Nayan).



Population estimates of wild animals in Jammu Wildlife Division:

The census and survey of wild animals in Jammu Division was conducted in Surinsar-Mansar, Jasrota and Nandni Wildlife Sanctuaries by the Department during the year 2005, 2006 and 2008. The details of which are given below:

S. No	Species	Mean population in the sanctuary	Year
A)	Jasrota Wildlife Sanctuary:		
1	Barking Deer	34	2005
2	Wild Boar	21	
3	Rhesus Monkeys	472	
4	Spotted Deer	21	
5	Red Jungle Fowl	141	
6	Grey Partridge	86	
B)	Nandni Wildlife Sanctuary:		
1	Barking Deer	109	2006
2	Goral	58	
3	Rhesus Monkeys	572	
4	Red Jungle Fowl	140	
5	Indian Pea Fowl	668	
6	Kalij Pheasant	61	
C)	Surinsar Mansar Wildlife Sanctuary:		
1	Barking Deer	39	2008
2	Red Jungle Fowl	677	
3	Rhesus Monkeys	964	
4	Pea Fowl	399	
5	Wild Boar	34	

Table – 8 : showing mean population of the wild animals in Jasrota, Nandni and Surinsar-Mansar Wildlife Sanctuaries

Water fowls:

A large number of migratory birds particularly from Central Asia, Russia visit the wetlands of Kashmir every year. Their number gives some idea with regard to the habitat conditions. The periodic census of water fowl in Kashmir is being conducting by the Department in Wetlands of Hokera, Hygam, Shallabugh and other adjoining Wetlands. As per the reports received from Wildlife Warden Wetland large number of migratory birds visit these Wetlands and during the year 2009-10 about 9 lakhs migratory birds have been counted. These studies are also required to be validated by proper census methodology.



Mallards in flight in Hokersar Wetland Reserve



Bar Headed Geese in Gharana Wetland Reserve

Peoples' Participation in Wildlife Conservation:

People's participation in any conservation programme is the corner stone for success of the effort. Mainly the activities are centered around awareness creation, eco clubs and celebration of wildlife week and world wetland day. Some initiative in this behalf has been taken up in Ladakh also and homestays under Ecotourism Programme have been established though it is largely unstructured. Recently to resolve man wild animal conflict, Conflict Resolution Squads have been approved to be formed in sensitive villages of the State. These Conflict Resolution Squads will act as primary response teams in order to control the conflict situation immediately. Awareness and Conservation Programme with Wildlife SOS and Wildlife Trust of India have been conducted by the Department for making people aware on the fringes of the forests and highly vulnerable areas about the do's and don'ts to be followed in case of insurgence of wild animal.

The Government has also been requested to constitute Advisory Committees for each Protected Area. This will also bring the Panchayats and the Civil Society apart from people living in and around the Protected Areas into the conservation and protection campaign. The Eco Development Committees as well as newly constituted Panchayats can help in the protection of the wildlife area, reduce dependence on resources of the protected area through development of own resources outside and simultaneously improving earning capacities. The people's participation has to be a logical sequel for voluntary effective management

of protected areas and is vital for success for the programme. In the coming years the department has to formulate different strategies which should include drawing up of village based micro plans for facilitating participation of the people into the programme and providing alternate income generation options besides engaging them in man wild animal conflict mitigation strategies. It is one component which needs far greater attention than hitherto done as the success of future plans depends on this.

Conservation Awareness and Education:

Reaching out to people and putting across the concept of wildlife conservation is an important aspect of awareness activities and has to be done carefully, logically and convincingly. The most important target group is that of school children because they constitute a group, which can not only influence large number of people but are also future responsible citizens who should be able to appreciate, analyse and be properly equipped to deal with the future challenges as compared to previous generations.

The Wildlife Protection Department has been making all possible efforts to make people aware about the importance of wildlife. The Department organizes various activities round the year throughout the State for various target groups. Celebration of Wildlife Week in the first week of October of every year is an important part of awareness generation. Various activities are organized for school children round the year all over the State. Major activities includes visit to wildlife parks, tracking through the wildlife sanctuaries, audio-visual shows, symposium and debates on wildlife conservation, painting completion and various other activities.

Due to prevailing situation in the State a large number of army establishments have come up along the border and near the Protected Areas. It is therefore important that the personnel of Army and Para-military forces are made aware of importance of wildlife conservation their cooperation sought for betterment of wildlife in the area. The Department is in constant touch with the Army and Para-military officials and periodically organizes group activities for the Jawans etc. emphasize the need of wildlife conservation particularly in Ladakh region.

Chapter - IV

Establishment of Zoos

The State Government vide order No. FST-20 of 1981 dated 04.02.1981 desired that the Wildlife Protection Department should examine the possibility of establishing a Zoo at Jammu. Accordingly in the year 1984, two Deer Parks at Manda and Mansar were established. The purpose of the Deer Parks was to restock spotted deer in Jammu reported to be extinct in Jammu at that time. Later, particularly at Manda (Jammu) it also housed rescued animals brought to the park in injured and sick conditions for treatment and care.

Over the years, the Department introduced a variety of other herbivores and also raised animal enclosures in the Park. Presently the park is very popular among the local people and tourists and hosts a variety of animals like Spotted deer, Neelgai, Sambhar, Barking deer, Chinkara besides Ducks, Peafowl, Black bear and a sizable number of Leopards, which are a major source of attraction for the visitors. The population of these animals is being continuously monitored, regulated and excess animals are being released in some Sanctuaries of Jammu Region. The Department had submitted Master plan for Jammu Zoo at Manda on which comments from Central Zoo Authority had been received. The revised Master Plan for Jammu zoo is required to be submitted to Central Zoo Authority.

Presently two sites, one at existing Manda Deer Park and one at Sidhra are under preliminary evaluation by the consultants for development of zoo, herbivore safari and butterfly park in Bahu Conservation reserve in Jammu.

Similarly the Wildlife Department had established enclosures at Dachigam National Park in the seventies and eighties to keep rescued animals. In the year 2001, a Leopard rescue centre was established at the periphery of the Park. Also on the instructions of Hon'ble Chief Minister of the State, during the year 2003, the

Wildlife Protection Department was asked to establish Deer Parks one at Pahalgam, District Anantnag and another at Gulmarg, District Baramulla. Accordingly under State Plan funding the Department established Deer Parks at Pahalgam and Gulmarg. The Deer Park at Gulmarg has not come into operation while animals are being kept at Pahalgam.

During the year 2009, the Central Zoo Authority approved the concept plan for preparation of detailed Master Plan for long term development of Zoos at Jammu, Srinagar and Ladakh in pursuance to the directions of the Hon'ble Supreme Court with objectives and themes of display. The Department has initiated the process of establishment of Zoos at Srinagar as per the guidelines of Central Zoo Authority. Two sites for establishment of Zoo at Srinagar have been identified and are presently under evaluation by experts along with existing site at Pahalgam. The master plan of Srinagar Zoo will follow subsequently to the Central Zoo Authority for approval and funding.

Construction of Asiatic Black Bear Rescue & Rehabilitation Centre at Dachigam National Park:

The State of J&K owes a great deal to its excellent environment of which the rich and varied fauna is an inescapable part. In this direction the Department of Wildlife conceived a project for the establishment of Black Bear Rescue & rehabilitation Centre - a lifetime care facility alongside existing Leopard enclosures - at Dachigam for rescued and abandoned bears. This bear facility shall serve in rescuing these animals from conflict and other disturbed habitats. This facility will also contribute to the increasing biological knowledge, scientific understanding for effective conservation in the wild.



Asiatic Black Bear Rescue & Rehabilitation Centre at Dachigam

Though the J&K Wildlife Protection Act provides for establishment of Zoos and procedure thereof, the upkeep of animals in captivity particularly in Rescue Centers and Conservation Breeding Centers are required to be brought at par with Central Wildlife Protection Act.

Chapter - V

Conservation and Developmental Programmes – Planning and Financing

The main focus of the Conservation and Developmental Programmes of the Department is to achieve the following:

1. To protect and conserve the biodiversity of the State;
2. To help nature maintain and perpetuate the ecological balance in protected areas and to achieve scientific conservation and improvement of wildlife therein;
3. To provide conservation education programmes and strengthen research facilities;
4. To benefit the locals especially people living in the fringes of the protected areas by involving them directly or indirectly through community participation in the conservation and developmental programmes;
5. To promote ecotourism in the protected areas;
6. To strengthen the department by strengthening the staff position and providing required infrastructure facilities.

In order to achieve the objectives of the programmes in preceding chapters the funds for management have been made available through the State Plan and the Centrally Sponsored Schemes viz. “Integrated Development of Wildlife Habitats” and “Conservation and Management of Wetlands” and very recently Compensatory Afforestation Management and Planning Authority (CAMPA).

In the past 5 years the financial support to the programme has been of the order of 3-4 crores each in the State Plan and Central assistance. However, considering the extent of protected area and the nature of interventions required the funding is inadequate.

(Rs. in lakhs)

Year	State Plan		Centrally Sponsored Scheme	
	Outlay	Expenditure	Outlay	Expenditure
2006-07	254.54	254.54	170.94	88.11
2007-08	236.10	236.08	418.43	322.62
2008-09	391.00	391.00	478.36	348.41
2009-10	378.80	377.16	748.64	636.00
2010-11	398.00	397.89	552.23	441.488

Table – 9 : showing details of funds received under State Plan and Centrally Sponsored Scheme with effect from the year 2006-07 to 2010-11

Compensatory Afforestation Management Planning Authority (CAMPA):

Under the provisions of J&K Forest (Conservation) Act, 1997, (FCA, 1997) and in compliance of orders of Hon'ble Supreme Court wherever any forest land is diverted for non-forest use, compensations in terms of the Net present value (NPV), Compensatory Afforestation (CA), Wildlife Development and other activities are paid by the user Agencies. All these monies are being collected as CAMPA fund. In order to manage these funds, the Government of Jammu and Kashmir has constituted State, Compensatory Afforestation Fund Management and Planning Authority (CAMPA) under SRO 354 dated 11.11.2009.

To make good the loss of natural resources and environmental services incurred due to removal of trees and other vegetation on account of diversion of Protected Area land, the amount received on account of NPV, CA and other charges is to be ploughed back through compensatory afforestation, regeneration, wildlife development and other allied activities.

In lieu of diversion of the wildlife area for various developmental activities funds have been specifically set aside under SRO 354 Compensatory Afforestation Fund Management and Planning Authority (CAMPA) for conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas. These funds are now available to

the Department in addition to State Plan budget and Centrally Sponsored Schemes funding for conservation and management of the wildlife areas.

13th Finance Commission:

For the first time, the Department has been brought under the purview of funding under 13th Finance Commission Award in the year 2010-11.

Non-Plan:

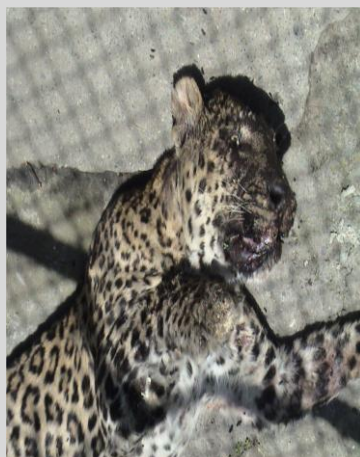
Funds under non-plan are available mainly for the salaries and other components viz. TA, OE, POL, maintenance etc. and is very meagre keeping in view the requirement of the Department.

Chapter - VI

Man Wild Animal Conflict

During the last decade the issue of Man Wild Animal Conflict has emerged as the single most important issue before the Wildlife Department which has caused immense loss to human life which has converted into public outcry. Not only the people residing adjacent to forests and Wildlife Protected Areas are the targets of this menace, even big town and city dwellers get affected.

During the last five years, deaths of many people and injuries to the scores of persons in the Wild Animal attacks have occurred. The conflict spans range of conditions from crop raiding, dangerous and sometimes fatal encounters with humans and retaliatory attacks on wildlife by the humans, which at times result in killing of wild animals as a result of mob fury. The attacks by large carnivores that result in human injury or death undermine conservation by resulting in negative attitudes towards such efforts.



Wild animals killed in retaliation in man wild animal conflicts

A study conducted jointly by Wildlife Trust of India (WTI) and Department of Wildlife Protection in the year 2006 pointed growing human population, increase in livestock numbers, land use change particularly in favour of orchards, dissection of habitats and their consequent shrinking as the basic reasons for resurgence of the wild animals outside the forest area. The two species in question in J&K are the

common leopard (*Panthera pardus*) and the black bear (*Ursus thibetanus*). However still a large number of communities expressed willingness to participate in mitigation efforts provided they are equipped properly to deal with conflict situations.



Victims of man wild animal conflicts

The study recommended to realign the compensatory mechanism, inter-sectoral cooperation between Health Department, Social Welfare Department and Wildlife Department, awareness programmes and training aimed at mitigation, setting up of Central Conflict Mitigation Center (CMCC), development of community-level Primary Reaction Teams, creation of Rapid Response teams and improving the man power resources available with the Department of Wildlife protection. Among the long term measures the study recommended habitat restoration / improvement, establishing monitoring and evaluation system to develop and maintain capacity of Forest and Wildlife Department, establish linkages with local institutions / research establishments, outsourcing work to external agencies.

The study also identified conflict prone areas, particularly in Kashmir valley. A proposal to enlist the support of local people in resolving conflicts was discussed in the 1st meeting of State Board for Wildlife (SBWL) and subsequently Government decided to constitute Conflict Resolution Squads at village level as local level Primary response teams. These squads are presently under constitution following approval of the proposal by the Steering Committee of CAMPA. 100 villages in the

state have identified for the purpose and the progress will be reviewed subsequently.

During the year 2006 a scheme to compensate people who died or got injured due to wild animal attacks had been introduced from January, 2006. The State Government approved payment of exgratia for loss of life and property due to predation / depredation by the wild animals, as per rates approved by the Government of India, Ministry of Environment & Forests. Ex-gratia payment is being paid @ ₹ 1.00 lakh to the family of deceased and from ₹ 0.05 lakh to ₹ 0.33 lakh in case of injuries depending upon the nature of injuries w.e.f. the year 2006-07 onwards.

The rates on compensation on account of loss of life / incapacitation and injuries to human beings was discussed and reviewed in the 4th meeting of the Standing Committee of State Board for Wildlife and recommended for enhancement. The Government order is expected shortly. The proposed rates are

- i. Death of human beings: ₹ 2,00,000
- ii. Permanent incapacitation: ₹ 1,50,000
- iii. Grievous injury: upto ₹ 50,000.00
- iv. Minor injury: ₹ 10,000.00

S. No	Year	OB		Received		Settled		Total Pending		Amount Paid (Rs. in lacs)	
		Death	Injured	Death	Injured	Death	Injured	Death	Injured	Death	Injured
1	2006-07	0	0	28	186	24	63	4	123	24.00	4.57
2	2007-08	4	123	20	171	22	140	2	154	22.00	11.88
3	2008-09	2	154	23	210	23	235	2	129	23.00	24.44
4	2009-10	2	129	22	264	21	207	3	186	21.00	17.38
5	2010-11	3	186	25	316	13	203	16	299	13.00	19.275
Grand total				118	1147	103	848	16	299	103.00	77.545

Table - 10 : showing status of conflict cases received and settled by the department and the amount disbursed w.e.f. January, 2006 to ending February, 2011

The intensity of conflict can be gauged from the following table which indicates the number of incidents which the department has to make in handling man wild animal conflict incidents reported to them by the villagers or other agencies:

S. No.	Name of the Division	Number of rescue parties deputed to tackle the conflict situation in the reported area	Action taken by the Department to handle the situation					
			Safe passage / driven back	Wild Animal captured / rescued	Cage installed	Injury / Death reported	Livestock depredation	Wild Animal eliminated
1	Central Division	26	12	-	3	2	-	-
2	North Division	53	31	3	5	8	4	2
	Total	79	43	3	8	10	4	2

Table- 11 : showing division wise intensity of conflict incidents being handled by the Department in the month of July, 2011

Chapter - VII

Diversion of Protected area land for non-forestry purposes

Since 1995, the conservation issues are being addressed by directions of Hon'ble Supreme Court in two major Writ Petitions (Civil) No. 337/1995 titled Centre for Environmental Law Vs Union of India and others and No. 202/1995 titled T. N. Godavarman Thirumalpad Vs Union of India and others. One important direction was that pending further orders no de-reservation of Forests, Sanctuaries and National Parks shall be affected and second nothing shall be removed from National Parks / Sanctuaries without the approval of Hon'ble Supreme Court. Later on the word forest was deleted. This has changed the whole process of management of Protected Area Network since as per these orders the overall management of the protected area is being guided by the directions of Hon'ble Supreme Court itself.

Now in pursuance to direction, the department processes the land diversion cases with respect to the Protected Area Network for non-forestry purposes as per the prescribed formats / guidelines of the Ministry of Environment and Forests, Government of India for placing the same before the State Board for wildlife / National Board for Wildlife and subsequently to the Central Empowered Committee of the Hon'ble Supreme Court.

Again in writ petition (civil) No. 202/1995 Hon'ble Supreme Court ordered that certain activities viz. Habitat Improvement Activities, Fire Protection Measures, Management of Wetlands & Grasslands, Communication & Protection Measures and Anti-poaching Activities can be taken up which are consistent with the provisions of Wildlife Protection Act, have Approved Management Plan and are consistent with the National Wildlife Action Plan. The management plans of some protected areas exist while others are required to be updated and rewritten.

Hon'ble Supreme Court vide their order in I.A. No. 1220 in I.A. 548 in CWP No. 202/95 dated 14th September 2007 has now permitted following activities to be undertaken in the National Parks & Wildlife Sanctuaries with the approval of National Board for Wildlife (NBWL):

1. Laying of underground drinking water pipeline upto 4 inch diameter.
2. Laying of 11 KV distribution lines for supply of electricity to rural areas.
3. Laying of telephone lines or optical fibre for providing communication facilities in rural areas.
4. Wells, hand pumps, small water tanks etc for providing drinking water facilities to villagers, who are yet to be relocated from the Protected Areas.
5. Anganwadies, Government schools and Government dispensaries which are essential for the inhabitants of people who are nearer to these forest areas shall continue and the Government may carry out construction activities in the forest area for the said purposes without there being any cutting or felling of trees.

Thus an elaborate procedure for denotification / diversion of land from National Parks / Sanctuaries for non-forestry purposes has been ordered.

The effect of these relaxations is that land diversions cases pertaining to the above said directions will now be decided by the National Board for Wildlife and works can be taken up in the Protected Areas as per approved Management Plan.

S. No	Name of the Proposal	Name of Protected Area	Name of User Agency	Nature of activity	Area
1.	Construction of Mughal road	Hirpora Wildlife Sanctuary	R&B	Construction of road	66.81 Hectare
2.	Drinking Water Supply Project	(Sitlee) Ramnagar Wildlife Sanctuary	ERA	Laying of pipelines	1.1925 Hectare
3.	Construction of Tunnel (T-2) at NH-1A (km.188 to km.286) from Banihal to Srinagar	Jawahar Tunnel Conservation Reserve	NHAI	Construction of a tunnel	8.97 Hectare Jawahar Tunnel CR
4.	Upgradation of existing	Changthang Wildlife	ITBP	Construction of	144.54

	katcha road from Koyul-Fortilay – Chushmule – Zarsar length approximately 76 km	Sanctuary		metal road	Hectare
5.	Upgradation of existing katcha road from Karzok – Chumar length approximately 75 km	Changthang Wildlife Sanctuary	ITBP	Construction of metal road	126 Hectare
6.	Upgradation of existing katcha road from Phobrang to Marsimikla-Hot Spring	Changthang Wildlife Sanctuary	ITBP	Construction of metal road	66.6 Hectares (37 km length)
7.	Construction of Phobrang to Chartse to Point 4433 road	Changthang Wildlife Sanctuary	ITBP	Construction of metal road	139.536 Hectare
8.	Constructing CL-9 surface road from Chushumle-Demchok	Changthang Wildlife Sanctuary	BRO	Construction of road	124.80 Hectare

Table – 12 : showing list of projects cleared for diversion of Wildlife Land for Non-Forestry Purposes

Chapter - VIII

Human Resource Development and Personnel Planning

Organization of Wildlife Protection Department: The Directorate of Wildlife Protection came into existence in the year 1979. Ever since then, the Department has been reorganized only once i.e. in the year 1991. The organization created was in consonance with the requirements of the J&K Wildlife (Protection) Act 1978. The Act has been amended in 2002. Since 2002, the mandate of the department has totally changed from game management to wildlife conservation including plants. The responsibilities of the Department have increased manifold in the back drop of increasing complexities in management of wildlife and its habitat, and implementation arrangements of various orders issued by the Hon'ble Supreme Court of India, Hon'ble High Court of J&K State. The department has also to take care of Wildlife Management outside the protected areas i.e. at the landscape level and also in the context of control of poaching and handling of Man Wild Animal Conflict Situations.

The present sanctioned staff strength of this Department is grossly inadequate to run the department efficiently. Man wild animal conflict has emerged as a major problem for the department apart from species oriented conservation.

A proposal to strengthen the Wildlife Protection Department was placed as one of the agenda item in the 1st meeting of the State Board for Wildlife being chaired by the Hon'ble Chief Minister. During the meeting the Board agreed in principle to strengthen the Wildlife Protection Department and recommended setting up a committee to examine this important matter. A proposal for reorganization / restructuring of the J&K Wildlife Protection Department has already been submitted to the Government.

The challenging wildlife conservation scenario today requires committed wildlife managers who possess scientific competence and social awareness aided by communication skills. They also need early detection and enforcement

capabilities against organized criminal elements nursed by big-money illegal trade. Accomplished wildlife biologists and social scientists are also necessary. Frontline staff equally must have similar skills at the grassroots level. The current capacity building and personnel planning and management measures need to be greatly strengthened to meet these challenges.

The Department in order to buildup the capacities of the field staff and simultaneously create data base for better management of protected areas has entered into memorandum of understanding with two reputed NGOs namely Wildlife Trust of India, Wildlife SOS and assistance from WWF Nature India, Wildlife Institute of India is also being taken. The WWF Nature India has assisted the Department in formulation of the Management Plan of Tsomoriri Wetland. And the Wildlife Trust of India has published jointly these documents like Goats on the Border, Predator Alert, Survey of Tibetan Antelope and Wild Yak in Ladakh, Beyond the Ban (Census of shahtoosh weaver of J&K by Wildlife Trust of India),

More such efforts are required to build capacities with other stake holders like universities and other NGOs particularly in the areas of Research, Monitoring and building of efficient Management Information System (MIS).

Chapter IX

Ecotourism

Under Section 28 of the Jammu and Kashmir Wildlife Protection Act, the Chief Wildlife Warden can permit recreation and trekking to any person inside the Protected Area. The Protected Area Management being a planned operation, an Ecotourism Plan is necessary for introducing regulating wildlife tourism in the prescribed Ecotourism Zone.

In 2007, Ecotourism practices have been initiated in some areas particularly Hemis National Park and Tsomoriri Wetland in Changthang Wildlife Sanctuary. Home stays have been created in the villages of Hemis National Park and Tsomoriri Wetland. In 2009, a component on Ecotourism has also been included in the five (5) year plan of Overa-Aru and Rajparian (Daksum) Wildlife Sanctuaries for project to be financed under Compensatory Afforestation and Management Planning Authority (CAMPA). However, the Ecotourism exists as a component of management plan rather than an organized activity as the Ecotourism Zones are not identified and people's participation in the programme is marginal.

The Department also sought assistance from M/s Juggle Lodges and Resorts, in the form of consultancy to identify potential sites for Ecotourism. These sites have been identified in Hokersar Wetland, Overa-Aru Wildlife Sanctuary, Gulmarg Wildlife Sanctuary, Hemis National Park and Changthang Wildlife Sanctuary, Jasrota Wildlife Sanctuary and Surinsar-Mansar Wildlife Sanctuary. Some of these areas are overlapping functional jurisdiction with other important Development Authorities particularly Pahalgam, Gulmarg and Sonamarg who are also in the process of developing infrastructure in the periphery of these Wildlife Sanctuaries. The Department needs important interface with these authorities to appropriately plan the Ecotourism Zones in the protected areas. Meanwhile, Ecotourism plan for Hirpora Wildlife Sanctuary has been submitted to the Government for financial

assistance and Plan for Jasrota Wildlife Sanctuary and Pangong Lake is on the anvil.

So far no guidelines have been finalized by the Ministry of Environment and Forests for developing Ecotourism and its regulation which are reported to be in the formulation stage.

People's participation is vital for success of any venture in the Protected Area be it the eco development in the fringe villages or organizing Ecotourism. So far organized people's participation in the wildlife programme is the weakest link in the management of Protected Areas. Its strengthening will pave way for better management of Ecotourism as well as eco development. The Wildlife Department has also requested the Government to form Advisory Committees for each Sanctuary and National Park for proper management of Protected Area as well as managing Ecotourism.

The potential of Ecotourism and need for its regulation can be estimated from the following table which provides the number of tourists particularly in selected Protected Areas for the period 2006 to 2009:

S. No.	Year	Number of visitors / tourists visiting Protected Areas of Ladakh	Number of visitors / tourists visiting Protected Areas of the State
1	2006-07	5107	15041
2	2007-08	23977	47185
3	2008-09	32037	50596

Table – 13 : showing number of visitors touring National Parks and Wildlife Sanctuaries from 2006 to 2009

The above table also indicates that about 50% of tourists are visiting the Protected Areas of Ladakh.

Chapter - X

Identification of Eco Sensitive Zones

The Protected Areas serve host of ecosystems services, and to enhance local benefits they need to be integrated in the management of the surrounding landscape. A focus on ecosystem services uncovers the benefits beyond protecting species through proper zoning and managements.

The Hon'ble Supreme Court directed the States to identify Eco Fragile / Eco Sensitive Zones around National Parks and Wildlife Sanctuaries within 10 km of the boundary of the National Park or Wildlife Sanctuary in OWP No. 460/2004 titled Goa foundation Vs Union of India and others. Thus apart from managing Protected Areas the Department as per the stipulation of National Wildlife Action Plan has also to identify areas around National Parks and Sanctuaries which can be declared as "**Eco Sensitive Zones**" for prescribing activities that are to be regulated and activities which can be prohibited with general consensus among the different development Departments. The Eco Sensitive Zones in the State has so far not been notified. The Department of Environment and Remote Sensing has been approached by the J&K Wildlife Protection Department to provide GIS Maps on an interval of 500 meters each from the Protected Area boundary with as much layers as possible in order to assess the land use pattern around the National Parks and Sanctuaries. The Regional Wildlife Wardens and Wildlife Wardens have also been required to submit the latitude / longitude, survey report and map of the sanctuary so that the Department of Environment and Remote Sensing can prepare GIS maps of Sanctuaries and National Parks. As of now all the cases falling within the Eco Fragile / Eco Sensitive Zones of 10 km and requiring approval under Environmental Protection Act are also required to be referred to the National Board for Wildlife. The Ministry of Environment and Forests have recently circulated procedures and guidelines for proceeding in such cases. A Draft MOU with Department of Environment and Remote Sensing has also been finalized so that

financial assistance under CAMPA is available to them for better management of Protected Areas as well as areas around them.

Recently Local Committees have been constituted in order to prepare proposals for the Eco Sensitive Zone. Other Development Departments have also been appraised of the relevant orders and guidelines.

Chapter XI

Main achievements of the 1st decade of the 21st Century

1. **Amendments** of the Jammu and Kashmir Wildlife (Protection) Act, 1978 have been made in the year 2002.
2. **Constitution of State Board for Wildlife:** The State Board for Wildlife was constituted under Section-5 of the Jammu and Kashmir Wildlife (Protection) Act, 1978 (amended upto 2002). The first meeting of the Board was convened on 21.12.2009 under the Chairmanship of Hon'ble Chief Minister of the State. Meetings of the Standing Committee of State Board for Wildlife are being conducted regularly.
3. **Abolishment of Fur Trade:** Inventorization of fur stock holders, payment of compensation to the furriers and burning of received fur stock in presence of representative from various authorities and media.
4. **Ban on Shahtoosh Trade:** Following the ban on shahtoosh trade, Sixteen (16) certificate of ownership for 483 number of items i.e. shawls, mufflers, scarves marked by way of electronic transponders and specified digital code has been issued to the declarant.
5. **Species Recovery Programme:** Three (3) endangered species namely Hangul, Markhor and Snow leopard have been brought under the purview of Species Recovery Programme of Ministry of Environment and Forests.
6. **Lifetime care facility for rescued Bear at Dachigam:** Lifetime care facility at Dachigam for rescued and abandoned Bears have been created.
7. **Conservation Breeding Centre at Tral:** Conservation Breeding Center of Hangul at Shikargah, Tral has been established by the Department with financial assistance of the Central Zoo Authority.
8. **Reorganizing Protected Area Network:** One more National Park namely "Kazinag" has been added by reorganizing the Protected Area Network.
9. **Deer Park:** Establishment of Deer Park at Pahalgam.
10. **Addition of Ramsar Sites:** Declaration of three (3) wetlands namely Tsomoriri in Ladakh, Hokersar in Kashmir and Surinsar-Mansar in Jammu as Ramsar Sites.

11. **Conflict Resolution:** Constitution of Conflict Resolution Squads as primary response teams in hundred sensitive villages.
12. **Payment of Compensation:** Initiation of providing compensation to the victims of man wild animal conflict.
13. **Management Plans:** Formulation of Management Plans for National Parks and Sanctuaries.

Chapter XII

Agenda for Coming Years

1. Management of Protected Areas as per Scientific Management Plans.
2. Restoration of Buffer Zones in the Vicinity of Protected Areas.
3. Reorganization / restructuring of Wildlife Protection Department.
4. Framing of Wildlife Rules.
5. Completion of Determination of Rights around National Parks and Sanctuaries.
6. Identification of Eco Sensitive / Eco Fragile Zones within 10 km boundary of the National Parks and Sanctuaries.
7. Redefining / consolidation of the boundaries of the Protected Areas.
8. Constitution of Advisory Committees to improve people's participation and support in Wildlife Conservation.
9. Introduction of Management Information System in Wildlife Management.
10. Scientific Management of Wetlands.
11. Establishment of Zoos at Srinagar and Jammu.
12. Promotion of Ecotourism in the State and Protected Area interpretation.
13. Strengthening of Research and Monitoring Wing.
14. Control of poaching and illegal trade in wild animal and plant species.
15. Human Resource Development and improved recruitment rules.
16. Landscape level conservation.
17. Formulation of State Wildlife Action Plan.
18. Immunization of livestock in and around Protected Area Network.

THE JAMMU AND KASHMIR GAME PRESERVATION
ACT, 1998 (1942 A.D)

ACT No. XXIV OF 1968

¹[SCHEDULE]

LIST OF STATE RAKHS

KASHMIR PROVINCE

1. ²[Omitted].
2. Khunmoo and grass – farm between Sangri and Chack Khunmoo
3. Khrew including Ladu area (as demarcated)
4. Tral-cum-Khiram (as demarcated)
5. Khul basin in Awantipura Tehsil

1. Schedule substituted by Cabinet order No. 710 –c of 1945 (G.G) dated 5-10-2002.
2. Deleted by C.O. No. 276 – c of 1951 dated 14-03-1957

6. Anchar Lake from Petkundal to Sangam.
7. Hokar Sar Jhil.
8. ¹[Rajparian Rakh]

JAMMU PROVINCE

1. Bahu.
2. Janghanoo
3. Thanoa.
4. Kotli.
5. Tandeh.
6. Badali.
7. Lansi.
8. Sansoo.
9. Nehranal
10. Kothian Dhar alongwith Sia and Thandapani areas (as demarcated).

EXEMPTION OF CERTAIN GAME SANCTUARIES AND GAME RESERVES FROM THE ACT

Annexure to 1Cabinet Order No. 710-C of 1945. – In exercise of the powers conferred by sub-section (3) of section 1 of the Jammu and Kashmir Game Preservation Act, 1998, the Government are pleased to exempt the following game sanctuary and Game Reserves from the provisions of the section 6 of the said Act to this extent that grazing therein may be permitted by the Chief Conservator of Forests.-

Game Sanctuary

Chumnai basin in Arau Valley as delineated in the map here – to annexed.

Game Reserves

Jammu Province

Jasrota Forest I and II including Bagni Block.- An Area near Kathua in the Kathua Forest Division.

1. Dalsar Rakh.
2. Marh Rakh

1. Inserted by C.O No. 108-c of 1947 G.G. dated 12-04-2004.
 2. Cabinet order No. 710-c of 1945 published in Government Gazette dated 5th Magh, 2002.

3. Gurarh Rakh.
4. Mansar (Sagoon Rakh)
5. Mansar (Tunnel Rakh)
6. Karan Rakh
7. Kheri Rakh
8. Agra Chak Rakh
9. Badyal Rakh
10. Makwal Rakh
11. Ramnagar Rakh

KASHMIR PROVINCE

1. Chashmashahi Rakh.
2. Oвра Rakh in Lidder Valley.
3. Khirram Rakh (Big Game area outside the State Rakh as delineated in map A hereto annexed).
4. Lower Dachigam Rakh (as delineated in the map B hereto annexed).
5. Ajjas Big Game area, (as delineated in map C hereto annexed).
6. Thajiwas Nullah (as delineated in map D hereto annexed).
7. ¹[Raj Parian Rakh]

AREA BETWEEN KHANMOO AND KHREW RAKHS TRANSFERRED TO GAME DEPARTMENT DECLARED AS A RESEVED AREA.

²[His Highness has been pleased to command that the area between in Khunmoo and Khrew Rakhs adjacent to Wuyan Sulpher Spring which has been an open area so far as shooting is

1. Item 7 added by Council Order No. 108 – c of 1947 dated 10th March, 1947 (G.G) dated 12th Baisakh, 2004.
2. Published in G.G. dated 4th Katik, 2001.

concerned be transferred from the Revenue Department to the Game Department and declared as a Reserved area where periodical shooting might be permitted only before snow fall.

GAME SANCTUARIES, GAME RESERVES AND RESERVED AREAS

3. Chumnai basin in Arau Valley.

NOTIFICATION II

Annexure to ¹[Cabinet order No. 710-C of 1945 dated 17th July, 1945].- In exercise of the powers conferred by section 5 of the J&K Game Preservation Act, 1998, and in supersession of Notification No. 2 appended to the said Act, the Government are pleased to declare the following areas as Game Reserves and Reserved Areas respectively, namely:-

I GAME SANCTUARIES

KASHMIR PROVINCE

1. Rajparian and Bewai Basins in Nowbug Valley.
2. Shankracharya hill.
3. Chumani basin in Arau Valley.
4. ²[Dachigam as delineated in the map annexed hereto].

JAMMU PROVINCE

1. Sommjani and Sapphire Mines Nullah in Kishtwar.
2. Pond near Sri Gouri Shanker in Kishtwar.
3. Places sacred to all communities.

LADAKH

1. Khushmul and Yimu basins in Baltistan.
2. Askor Nullah in Randu, Baltistan.

1. C.O. No. 710 –c of 1945 published to G.G. dated 5th Magh, 2002.
2. Item 4 substituted by C.O. No: 276-c of 1951 dated 14th March, 1951.

II GAME RESERVES

CLASS A

KASHMIR PROVINCE

1. Achabal Rakh.
2. Chataragul Nullah in Sindh Valley.
3. Wangat Nullah in Sindh Valley.
4. Kandi and Khras Nullah in the Uri Tehsil the lower boundary of which is the new road to Haji Pir.
5. Astore shooting area as specified in Schedule A.
6. Kazinag and Kafirkhan area including Salkhala the Moji and Shamsburry Rakhs.

JAMMU PROVINCE

1. *Sheshera Forest*.- An area near Rajouri in the Mirpur Forest Division.
2. *Jallangar Forest*.- An area near Reasi in the Reasi Forest Division.
3. *Jasrota Forest I and II including Bagni Block*.- An area near Kathua in the Kathua Forest Division.

LADAKH

1. Ovis Ammon Blocks (specified in Schedule A).
2. Shapu Blocks (specified in Schedule B).

KASHMIR PROVINCE

1. Chashmashahi Rakh.
2. Oвра Rakh in Lidder Valley
3. Khirram Rakh (Bigh Game area outside the State Rakhs as delineated in the map A hereto annexed).
4. ¹[Omitted].
5. Ajjas (Bigh Game area as delineated in map C hereto annexed).
6. Thajiwas Nullah as delineated in map D hereto annexed).

1. Deleted by C.O. No. 276-c of 1951 dated 14-03-1951.

JAMMU PROVINCE

1. Dalsar Rakh
2. Marh Rakh.
3. Gurarh Rakh
4. Mansar (Sagoon Rakh)
5. Mansar (Tunnel Rakh)
6. Keran Rakh
7. Kheri Rakh
8. Agra Chak Rakh.
9. Badyal Rakh.
10. Makhwal Rakh
11. Ramnagar Rakh.

Note.- Shooting or killing of pigs within five miles of the Game Reserves Class B is prohibited.

CLASS C

KASHMIR PROVINCE

1. Hygam Jhil.
2. Mirgund Jhil.
3. The Pampur, Karanchum Maniboog and Chandara Jhils.

III RESERVED AREAS

KASHMIR PROVINCE

1. Dara Chikor Area
2. Nishat Chikor Area
3. Bren Chikor Area
4. Zewan Area delineated in map E
5. Khirram Chikor Area, outside the State Rakh as delineated in map F.
6. Ajjas Chikor Area.
7. Wuyan Chikor Area Situated between Khrew and Khunmoo Rakhs as delineated.

Note.- Only two shoots will be permitted in Ajjas Chikor Area at the discretion of the Game Warden after His Highness the Maharaja Bahadur leaves for Jammu. No permits will be issued for Wuyan Chikor area after snowfall.

SCHEDULE A

1. The tributaries of the Indus from Dumbochik to Koyul.
2. The watershed of the Koyul river as far as its junction with the Indus, below this all tributaries of the Indus as far as big bend of the river at Durgti.
3. Hanie river basin as far as south of Hanle Monastery.
4. Hanle river basin south of item 3.
5. The tributaries of the Indus between the Hanle river and Puga river.
6. The country lying between 3 and 4 on the east 5 on the north and 6 on the west.
7. The basin of the Salt Lakes and tributaries of the Indus between (and including) the Puga river as far as the water of the Tiri Foo.
8. The basin of the Tsomoriri Lakes and the Phirsi Nullah.
9. The Tiri Foo and the country lying to the north bounded by Indus on the north and east the Leh Kulu road on the west and the watershed of Tsokar Camo, plain on the south.
10. The watershed of the Zera and Rukhchen South.
11. The watershed of the Marka river.
12. The Karnah Nullah.
13. The triangular area lying between Choosbal on the north the Frontier on the east, the watershed of the Choosbal river and Chamtang Foo on the west and the Indus on the South from Chamtang to Dungti.
14. The Catchment area of Tanse river.
15. The Changchenmo area.

SCHEDULE B.

1. The Igu and Chimre Nullah.
2. Nag and Sabu
3. Phyang and Tara
4. Umlao and Nomo
5. Bazgo and Myel.
6. Kikir and Suspul and Valh-Drokpa.

7. Hemis Shupka Nullah and Khalsi.
8. Damkar and Hanu.
9. Memiskit and Wanla.
10. Liuchi and Lardu.
11. The watershed of the Zaskar and Marka river including the Skew Nullah.
12. Rampakh.
13. Stock and Shang
14. Masho
15. Shera and tockey.
16. Kamdok.

CERTAIN AREA OF NOWSHERA RANGE DECLARED AS GAME RESERVE

Forest Department Notification ¹[SRO – 323 dated 6th July, 1970].- In exercise of the powers conferred by section 5 of the J&K Game Preservation Act, 1998 (XXIV of 1998), and in partial modification of Annexure to Cabinet Order No. 719 – C of 1945 dated 18th July , 1945, the Government hereby declare the area of compartment Nos, 32, 33, 34, 35, 36, 39, 40, 41, 42 and 43 ²[comprising of 4054 acres] of Nowshera Range, Rajouri Division, Jammu Circle as Game Reserve.

CERTAIN AREAS OF MALGAM RAKH, SAGIPORA ZALOORA KANDI RANGE AND HARWAN DECLARED AS GAME RESERVES AND RESERVED AREAS.

Forest Department ³[*Notification SRO – 524 dated 12th November, 1970*] (*Annexure A*).- In exercise of the powers conferred by section 5 of the Jammu and Kashmir Game Preservation Act, Samvat 1998 (XXIV of 1998), and in amplification of annexure to Cabinet Order No. 710-C of 1945 dated 17th July, 1945, the Government hereby declared the areas mentioned in Schedule A&B appended to this Notification as Game Reserves and Reserved areas respectively.

-
1. SRO – 323 published in G.G. dated 6th July 1970
 2. Substituted by SRO – 103 dated 13th March, 1971 for comprising of 454 areas.
 3. Published in G.G. dated 12th November, 1970.

Schedule A
Game Reserves

Malgam Rakh

	Boundaries
North	Sadarkote and Chak
South	Zainkote and Hakra
East	Hokr and Chak.
West	Zainpora and Sadrukote.

Schedule B
Reserved Areas

I.	Sagipora Zaloora Landi Range Kamraj Forest Div.	Area 1121 Hectares Boundaries
	North	Said Mallo Forest
	South	Sagipora and Zalora Forests
	East	Harwan Forests
	West	Samnar Forests
II.	Harwan	
	North	Sagipora
	South	Tujar Pahillihar Lands.
	East	Immerzalwari Forests
	West	Harwan and Lathisl at Village.

CERTAIN AREA OF SAGIPORA ZALOORA KANDI RANGE AND HARWAN
DECLARED AS RESERVED AREAS

Forest Department ¹[Notification SRO – 525 dated 12th November, 1970] (Annexure B). – In exercise of the powers conferred by sub-section (I) of section 5 of the Jammu and Kashmir Game Preservation Act Samvat 1998 (XXIV of 1998), the Government hereby declare the areas of Sagipora Zaloora Kandi Range Kamraj Forest Division and Harwan the particulars of which are specified in the schedule given below as Reserved Areas:-

SCHEDULE

I.	Sagipora Zaloora Kandi Range Kamraj Forest Div	Area 1121 Hectares Boundaries.
	North	Said Mallo Forests
	South	Sagipora and Zalora Forest
	East	Harwan Forests
	West	Samnar Forests

1. SRO – 525 of 1970 published in G. G. dated 12th November, 1970

II. Harwan

	Boundaries
North	Sagipora
South	Tujar Pamlihar Lands.
East	Immerzalwari Forests
West	Harwan and Lathislat Village

**Government of Jammu and Kashmir
Civil Secretariat, Forest Department**

.....

Subject: National Parks, Sanctuaries and Game Reserves in the Jammu and Kashmir State.

Reference: Cabinet Decision No. 35 dated 02.02.1981.

.....

Government Order No. FST/20 of 1981

Dated 04th February 1981

.....

In the interest of Wildlife Preservation and Development, sanction is accorded to notify the following areas as National Parks, Sanctuaries, Game Reserves and Man & Biosphere Reserve under Section 17(1) of J&K Wildlife (Protection) Act of 1978:

I. National Parks:

1. Dachigam National Park – Kashmir
2. Kishtwar High Altitude National Park – Jammu
3. Hemis High Altitude National Park – Ladakh

II. Wildlife Sanctuaries:

1. Overa Wildlife Sanctuary – Kashmir
2. Ramnagar Wildlife Sanctuary – Jammu
3. Nandni Wildlife Sanctuary – Jammu
4. Surinsar – Mansar Patwar Wildlife Sanctuary – Jammu
5. Trikuta (Vaishno Devi) Wildlife Sanctuary – Jammu

III. Game Reserves:

1. Bahu Game Reserve – Jammu
2. Jawahar Tunnel Game Reserve – Jammu
3. Thain Game Reserve – Jammu
4. Sudh Mahadev Game Reserve – Jammu
5. Shang Game Reserve – Leh
6. Sabu Chakore Reserve – Leh
7. Kanji Game Reserve – Leh
8. Bodhkharbu Game Reserve – Kargil

IV. Wetland Reserves:

1. Shallabugh Wetland Reserve – Kashmir
2. Pargwal Wetland Reserve – Jammu
3. Gharana Wetland Reserve – Jammu

4. Sangral Wetland Reserve – Jammu
5. Kukrian Wetland Reserve – Jammu
6. Nanga Wetland Reserve – Jammu
7. Changthang Wetland Reserve – Leh
8. Tsomoriri Wetland Reserve – Leh
9. Noorichan Wetland Reserve – Leh
10. Cheshul Wetland Reserve – Leh
11. Hanley Wetland Reserve – Leh

V. Man and Biosphere Reserve:

1. Overa Man and Biosphere Reserve – Kashmir
2. Gulmarg Biosphere Reserve – Kashmir

The Chief Wildlife Warden / Deputy Chief Wildlife Warden should examine the possibility of starting a Zoo in Jammu.

By order of Government of Jammu and Kashmir.

Sd/-
(J. P. Kesar)
Secretary to Government
Forest Department

No. FST/GP-9/90

Date: 4th February 1981

Copy forwarded to the:

1. Chief Wildlife Warden, Jammu for information and necessary action.
2. Deputy Chief Wildlife Warden, Srinagar for information and necessary action.
3. Director of information J&K Jammu for information.
4. Secretary to Government, General Administration Department (w.3.s.c).
5. Secretary to Governor for information.
6. Secretary to Chief Minister for information.
7. Pvt. Secretary to Forest Minister for information to Forest Minister.
8. P.A. to Deputy Forest Minister for information of Deputy Forest Minister.
9. Stock file / master file (Personal Section).

**Government of Jammu and Kashmir
Civil Secretariat: Forest Department**

Sub: Re-organization of Game Preservation Wing of the Forest Department.

Ref: Cabinet Decision No. 288 of 1979 dated 31.07.1979.

**Government Order No. 132-FST of 1979
D a t e d : 13th August, 1979**

Sanction is accorded to the:

- a) Re-designation of the “Directorate of Game Preservation” as Directorate of Wildlife Protection” for the implementation of the provisions of the J&K State Wildlife (Protection) Act, 1978. The Directorate of Wildlife Protection will function under the overall control of the Chief Conservator of Forests who has already been designated as Chief Wildlife Warden vide SRO No. 27 dated 12.01.1979 in term of section 3(i) of the said Act.
- b) Creation of a post of Deputy Chief Wildlife Warden temporarily for a period of two years to begin with, keeping the post of Director Game Preservation in abeyance, in the J&K Forest (Gazetted) Service in the scale of Rs. 1400-1900 and the appointment of Mr. Mir Inayatulla (IFS) as Deputy Chief Wildlife Warden in an Ex-Cadre capacity on the following terms:
 - i. That Mr. Mir will have the option of drawing his own pay and allowances as senior scale IFS Officer or the pay of the post in the State Service Scale of Rs. 140-0-1900 plus D.A. at the rates admissible to IFS officers.
 - ii. The temporary appointment of Mr. Mir to the ex-cadre post will not confer any right or privilege upon him. In respect of the protection of his pay and allowances or any claim for promotion in his parent cadre on reversion to that cadre (IFS).
- c) Re-organization of the Wildlife Protection Wing of the Forest Department with the creation of additional posts as shown in annexure to this order.

- d) Bifurcation of the present Ladakh Forest Division into two forest division of Leh and Kargil with jurisdiction confirming to the revenue districts of Lah and Kargil respectively.
- e) Posting of wildlife Warden created for Ladakh Region as Division Forest Officer Kargil with concurrent power of Wildlife Warden for Kargil under the J&K State Wildlife Protection Act, 1978 for Kargil District, and
- f) Conferment of powers of Wildlife Warden to Divisional Forest Officer, Leh under the provisions of the J&K State Wildlife (Protection) Act, 1978.

This issues with the concurrence of the Finance Department conveyed vide their U.O. No. FE-II-429/78-Games-2/78 dated 20.10.1978 and No. FE-II-631/2/78-Games dated 23.01.1979.

By order of the Government of Jammu and Kashmir.

Sd/-
(J. P. Kesar)
Secretary to Government
Forest Department

No. FST/20(78)P&B

Date: 13.08.1979

Copy forwarded for information and necessary action to:

1. All Commissioners / Secretaries to Government.
2. All Heads of Departments.
3. Secretary to Governor / Chief Minister / Legislative Council / Legislative Assembly / Public Service Commission.
4. Director, Radio Kashmir Srinagar.
5. Accountant General, Srinagar / Jammu.
6. Division Commissioner, Srinagar / Jammu.
7. All District Development Commissioners.
8. Director Game Preservation, Srinagar.
9. Manager Government Press, Srinagar for publication in the Government Gazette.
10. Private Secretaries / PROs to Cabinet Ministers.
11. P.S. to Ministers of State / Deputy Ministers.
12. Section I (w.3.s.c).

Present staff Strength of the Wildlife Department

Designation of Post	No.of Posts
Gazetted	
Principal Chief Conservator of Forests (WL) and Chief Wildlife Warden	1
Chief Conservator of Forests (Eco-tourism)	1
Regional Wildlife Warden	3
Chief Wildlife Vet.&Biologist	1
Dy. Director (Planning)	1
Accounts Officer	1
Private Secretary	1
Assistant Wildlife Warden	13
Research Officer	1
Ecologist	1
Asstt;Engineer Civil	1
Asstt. Vety. Surgeon	2
Range Officer Grade I	8
Non - Gazetted	
Range Officer Grade II	7
Supervisor Grade II	2
Foresters	31
Dy. Foresters	9
Guards/Field Operator	333
Junior Engineer	2
Drafts Man	1
Wildlife Prosecutor	1
Section Officer	1
Stastical Officer	1
Head Assistant	4
Jr. Stenographer	1
Stastical Assistant	1
Accountant	1
Sr. Assistant	10
Jr.Assistant	22
Store Keeper	1
Mistry/Works Supervisor	1
Lab Assistant	2
Senior Cameraman	1

Cameraman	1
Project Operator	1
Driver/Chaffur	8
Watchers	25
Malies	5
Jamadar	1
Orderlies	14
Lab attendant/Boy	2
Chowkidars,	21
Farash	1
Helpers	204
Total	750

Guidelines for Scientific Research in the Wildlife Protected Areas of J&K

1. Introduction

Scientific Research in the Wildlife Protected Areas is vital for a better understanding of ecosystems, their functions, ecology and status of various species and their habitats. Information generated by scientific research in Protected Areas would be useful to the managers for taking appropriate conservation and management actions. Since Protected Areas (PA) also serve as 'control sites' for comparing a large number of environmental parameters and ecological processes with those of human influenced ecosystems, organizations and individuals from India as well as abroad would like to undertake basic as well as applied research within Protected Areas.

As per the guidelines of the National Wildlife Action Plan (2002-2016), research projects having the objectives of measuring biological diversity, monitoring the status of indicator / flagship / threatened species of flora and their breeding biology will be given priority in granting permission. In addition, applied research is also needed to help overcome specific management problems in Protected Areas. Multi-disciplinary integrated research encompassing scientific and socio-economic aspects related to Protected Area management also need to be encouraged.

Recognizing the significance of well conceived and problem oriented research in the Protected Areas, adequate provisions for research work have been made in the Wildlife (Protection) Act, 1978, Section 28 (grant of permit) of the Act gives authority to the Chief Wildlife Warden (CWLW) to grant permission for research.

2. Wildlife Research

Wildlife Research is defined here as research conducted by qualified scientists, including social scientists, or by assistants / students working under their supervision or Park Managers. Wildlife research may also be conducted by properly qualified wildlife enthusiasts and conservationists.

3. Duration of research

Based on the anticipated period of study specified in the proposals, wildlife research may be categorized as follows :

- i Short-term research: Surveys or short studies involving field work up to one year in duration.
- ii Medium term research: Studies requiring two to four years for completion.
- iii Longer-term research: Studies exceeding four years for completion.

After taking into consideration the recommendation of the Committee constituted vide Ministry of Environment & Forests (MoEF) Notification No. 6-3/2003 WL I dated 24.10.2005 following guidelines are hereby formulated to facilitate processing and grant of permission for carrying out research in Protected Areas.

4. Processing of research proposals and grant of permission

Under existing laws the Chief Wildlife Wardens are authorized to permit research in Protected Areas. In all cases the proposal should be submitted to the Chief Wildlife Warden. In case of foreign nationals desirous of conducting research in Protected Areas, permission from Ministry of External Affairs / Ministry of Home Affairs, and National Biodiversity Authority if required in Law should be obtained.

The proposal should contain synopsis, objectives, methodology, literature review, work plan, budget, source of funding, duration, expected outputs and terms of reference. The proposal will be evaluated by a 'Technical Committee' consisting of at least three members constituted under the chairmanship of the Chief Wildlife Warden of the State. Other members could be representative of the State Biodiversity Board (if constituted), experts in relevant disciplines of wildlife management, ecology, social science etc. If the state has not constituted the State Biodiversity Board, suitable nomination from university/research institute or

any other such organization involved in ecological/wildlife research may be made. The technical Committee should meet at least once in a quarter on fixed dates and consider proposals received at least 15 days prior to the date of meeting. The committee would also suggest the areas of research relevant to management decisions with respect to Protected Areas of the state. The technical committee may have additional 'Subject Specialists' as a 'Special Invitee'.

However a research project which has been approved by *Department of Science and Technology, Ministry of Environment & Forests, Department of Biotechnology and other scientific Department of the State / Central Government would not be required to be reviewed by the committee. Chief Wildlife Warden may pass necessary orders in such cases to grant access.*

- 4.3 The research questions and methodologies used shall be decided by the researchers according to their own priorities / reliable interest, in the case of independently funded wildlife research projects. In case of manipulative or interventional studies, the methods used must be in accordance with standard practice. Research questions in case of Wildlife Research projects sponsored by the State Department of Wildlife shall be arrived at in consultation with the respective Park Managers. Conclusions and recommendations should be discussed with the Park Managers to ensure the field applicability of the studies.

5. Time Frame for grant of permission

- 5.1 Proposal for short-term research (<6 months) shall be processed and the decision communicated by the Chief Wildlife Warden within a period of two months *if it involves one PA.*

- 5.2 If the short-term research involves several Protected Areas and / or administrative forest divisions, the Chief Wildlife Warden *shall process and communicate decisions* within a period of three months.
- 5.3 Proposals for medium and long-term research (>6 months) shall be *processed and communicated* by the Chief Wildlife Warden within a period of three months. In case of proposals whose coverage is beyond a single Protected Area site, a maximum of four months may be taken to process and communicate the decision.
- 5.4 In case a research proposal is rejected or any modifications suggested, either by the Chief Wildlife Warden the reasons for such rejection / suggestions must be clearly communicated to the researcher as per (5.1)-(5.3) above from the date of receipt of proposals.

6. **General Provisions**

- 6.1 It is well recognized that the products of any research in terms of its scientific results and publications must be authorized by the researcher / organization. None other than the individuals responsible for framing research proposals and actually conducting research should have the authorship of scientific papers from the findings. However, the final report and other scientific publications of the project (hard and soft copy) should be submitted within three months (for short-term research) or six months (for long-term projects) to the concerned Chief Wildlife Warden. For long-term projects, half yearly progress reports should be submitted to the park authorities by the researcher. The Chief Wildlife Warden shall take appropriate action on the researcher / organization for non-submission of final reports on time as per 'Terms and Conditions' stipulated in the letter granting permission for the project.

- 6.2 Wildlife Institute of India would act as the national nodal agency on wildlife research. It would be obligatory on the part of researcher / research organization to provide a soft and hard copy of his data / findings / thesis etc. to Wildlife Institute of India who in turn would make it available on their website for easy access.
- 6.3 A researcher will not be required to pay entry fee in the park. If researcher needs to use a vehicle for his research activities inside the park no entry fee for the vehicle will be charged. Other facilities when availed will be charged at the rate applicable to Government officials on duty.
- 6.4 Movements of the researcher and or his assistants in the Protected Area shall be recorded in a log book to be maintained by him which will be submitted to the park management every month.
- 6.5 Movement at night shall be allowed only if it is part of the approved research project. A schedule for such movements shall be developed in consultation with the local authorities and shall be permitted accordingly by park authorities.

In case of any violation of the conditions of permission, Chief Wildlife Warden shall have the authority to revoke the permission.

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Checklist of birds of State of Jammu and Kashmir

S. No.	Common English Name	Scientific Name	Local Name
1	Black-necked Grebe	<i>Podiceps nigricollis</i> (4)	
2	Great Crested Grebe	<i>Podiceps cristatus</i> (3)	
3	Little Grebe	<i>Tachybaptus ruficollis</i> (5)	Pind
4	Great Cormorant	<i>Phalacrocorax carbo</i> (26)	Mong
5	Little Egret	<i>Egretta garzetta</i> (49)	Nil Brag
6	Great Egret	<i>Casmerodius albus</i> (45)	Dodh Brag
7	Eastern Cattle Egret (Cattle Egret)	<i>Bubulcus ibis</i> (44)	
8	Grey Heron	<i>Ardea cinerea</i> (35-6)	Brag
9	Indian Pond-heron	<i>Ardeola grayii</i> (42-2a)	Broku
10	Black-crowned Night-heron	<i>Nycticorax nycticorax</i> (52)	Bor
11	Little Bittern	<i>Ixobrychus minutus</i> (55)	Goi
12	Eurasian Bittern (Great Bittern)	<i>Botaurus stellaris</i> (59)	
13	Wooly-necked Stork (White-necked Stork)	<i>Ciconia episcopus</i> (62)	
14	Black Stork	<i>Ciconia nigra</i> (65)	
15	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i> (66)	
16	Glossy Ibis	<i>Plegadis falcinellus</i> (71)	
17	Bar-headed Goose	<i>Anser indicus</i> (82)	
18	Graylag Goose	<i>Anser anser</i> (81)	Anz
19	Common Teal	<i>Anas crecca</i> (94)	Keus
20	Garganey	<i>Anas querquedula</i> (104)	Nour
21	Gadwall	<i>Anas strepera</i> (101)	Dudan
22	Eurasian Wigeon	<i>Anas penelope</i> (103)	Shirni Budan
23	Northern Shoveller	<i>Anas clypeata</i> (105)	Honk
24	Northern Pintail	<i>Anas acuta</i> (93)	Sukh Pachhan

25	Indian Spot-billed Duck (Spot-billed Duck)	<i>Anas poecilorhyncha</i> (97-9)	
26	Mallard	<i>Anas platyrhynchos</i> (100)	Nilij Thuj
27	White-headed Duck	<i>Oxyura leucocephala</i> (123)	
28	Greater Scaup	<i>Aythya marila</i> (112)	
29	Tufted Duck (Tufted Pochard)	<i>Aythya fuligula</i> (111)	Thanthur
30	Ferruginous Duck (Ferruginous Pochard)	<i>Aythya nyroca</i> (109)	Harwat
31	Common Pochard	<i>Aythya ferina</i> (108)	Khrukh
32	Red-crested Pochard	<i>Rhodonessa rufina</i> (107)	Tsarow
33	Cotton Teal (Cotton Pygmy-goose)	<i>Nettapus coromandelianus</i>	
34	Common Merganser	<i>Mergellus merganser</i> (120-1)	
35	Black-winged Kite (Black-shouldered Kite)	<i>Elanus caeruleus</i> (124)	
36	Black Kite	<i>Milvus migrans migrans/govinda</i> (132-4)	Gaunt
37	Besra Sparrow hawk	<i>Accipiter virgatus</i> (149-51)	
38	Shikra		
39	Northern Goshawk	<i>Accipiter gentilis</i> (136)	
40	Eurasian Sparrow hawk	<i>Accipiter nisus</i> (147-8)	
41	Steppe Buzzard (Eurasian Buzzard)	<i>Buteo buteo</i> (155-6)	
42	Long-legged Buzzard	<i>Buteo rufinus</i> (153)	
43	Upland Buzzard	<i>Buteo hemilasius</i> (154)	
44	Oriental Honey-buzzard	<i>Pernis ptilorhyncus</i> (129-30)	
45	Crested Serpent-eagle	<i>Spilornis cheela</i> (196-200)	
46	Short-toed Eagle (Short-toed Snake-Eagle)	<i>Circaetus gallicus</i> (195)	
47	Booted Eagle	<i>Hieraaetus pennatus</i> (164)	
48	Bonelli's Eagle	<i>Hieraaetus fasciatus</i> (163)	

49	Mountain Hawk-eagle	<i>Spizaetus nipalensis</i> (158)	
50	Greater Spotted Eagle	<i>Aquila clanga</i> (170)	
51	Steppe Eagle	<i>Aquila nipalensis</i> (169)	
52	Golden Eagle	<i>Aquila chrysaetos</i> (166)	
53	Osprey	<i>Pandion haliaetus</i> (203)	
54	Lesser Fish-eagle (Lesser Grey-headed Fish-Eagle)	<i>Ichthyophaga humilis</i> (177)	
55	Pallas's Fish-eagle	<i>Haliaeetus leucoryphus</i> (174)	Gadh Grad
56	White-tailed Eagle	<i>Haliaeetus albicilla</i> (172a)	
57	White-rumped Vulture (Indian White-backed Vulture)	<i>Gyps bengalensis</i> (185)	Patyal
58	Slender-billed Vulture	<i>Gyps tenuirostris</i>	
59	Griffon Vulture (Eurasian Griffon-Vulture)	<i>Gyps fulvus</i> (180, 183)	Grad
60	Himalayan Vulture (Himalayan Griffon-Vulture)	<i>Gyps himalayensis</i> (181)	
61	Egyptian Vulture	<i>Neophron percnopterus</i> (186-7)	
62	Bearded Vulture	<i>Gypaetus barbatus</i> (188)	
63	Cinereous Vulture	<i>Aegypius monachus</i> (179)	
64	Montagu's Harrier	<i>Circus pygargus</i> (191)	
65	Pallid Harrier	<i>Circus macrourus</i> (190)	
66	Hen Harrier	<i>Circus cyaneus</i> (189)	
67	Western Marsh Harrier (Eurasian Marsh Harrier)	<i>Circus aeruginosus</i> (193-4)	Alurh
68	Merlin	<i>Falco columbarius</i> (217-8)	
69	Lesser Kestrel	<i>Falco naumanni</i> (221)	
70	Common Kestrel	<i>Falco tinnunculus</i> (222-4)	Bohar
71	Eurasian Hobby (Northern Hobby)	<i>Falco subbuteo</i> (212-3)	
72	Peregrine Falcon (Shaheen)	<i>Falco peregrinus</i> (210)	Baz
73	Peregrine Falcon	<i>Falco peregrinus</i>	

74	Red-capped Falcon	<i>Falco peregrinus</i>	
75	Laggar Falcon	<i>Falco jugger (208)</i>	
76	Saker Falcon	<i>Falco cherrug (206-7)</i>	
77	Eastern Saker Falcon	<i>Falco cherrug</i>	
78	Chukor Partridge	<i>Alectoris chukar (234-6)</i>	Kakav
79	Tibetan Partridge	<i>Perdix hodgsoniae (248-9)</i>	
80	Grey Francolin	<i>Francolinus pondicerianus (244-6)</i>	
81	Black Francolin	<i>Francolinus francolinus (237-9)</i>	
82	Snow Partridge	<i>Lerwa lerwa (227)</i>	
83	Common Quail (Grey Quail)	<i>Coturnix coturnix (250)</i>	
84	Jungle Bush-quail	<i>Perdicula asiatica (255-8)</i>	
85	Red Jungle fowl	<i>Gallus gallus (299-300)</i>	
86	Western Tragopan	<i>Tragopan melanocephalus (285)</i>	
87	Himalayan Monal (Impeyan Monal)	<i>Lophophorus impejanus (290)</i>	Sona chikur
88	Kaleej Pheasant	<i>Lophura leucomelanos (293-8)</i>	
89	Koklass Pheasant	<i>Pucrasia macrolopha (303-6)</i>	
90	Himalayan Snowcock	<i>Tetraogallus himalayensis (232)</i>	Shin Kakav
91	Tibetan Snowcock	<i>Tetraogallus tibetanus (229-31)</i>	
92	Indian Peafowl	<i>Pavo cristatus (311)</i>	
93	Black-necked Crane	<i>Grus nigricollis (321)</i>	
94	Demoiselle Crane	<i>Grus virgo (326)</i>	
95	Sarus Crane	<i>Grus antigone (323-4)</i>	
96	Siberian Crane	<i>Grus leucogeranus (325)</i>	
97	Houbara Bustard (MacQueen's Bustard)	<i>Chlamydotis macqueeni</i>	
98	European Water Rail (Water Rail)	<i>Rallus aquaticus (327-8)</i>	
99	Eastern Baillon's Crake (Baillon's Crake)	<i>Porzana pusilla (337)</i>	Grattu

100	Spotted Crake	<i>Porzana porzana</i> (338)	
101	Ruddy-breasted Crake	<i>Porzana fusca</i> (339-40)	Gill
102	Brown Crake	<i>Amauornis akool</i> (342)	
103	White-breasted Waterhen	<i>Amauornis phoenicurus</i> (343-5)	
104	Purple Swamp hen	<i>Porphyrio porphyrio</i> (348-9)	Wontech
105	Common Moorhen	<i>Gallinula chloropus</i> (347-7a)	Tech
106	Eurasian Coot (Common Coot)	<i>Fulica atra</i> (350)	Kolaur
107	Greater Painted-snipe	<i>Rostratula benghalensis</i> (429)	Gug
108	Ibis bill	<i>Ibidorhyncha struthersii</i> (433)	
109	Pied Avocet	<i>Recurvirostra avosetta</i> (432)	
110	Black-winged Stilt	<i>Himantopus himantopus</i> (430-1)	Lang Zeyet
111	Eurasian Oystercatcher	<i>Haematopus ostralegus</i> (360-1)	
112	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i> (358)	Gund Kav
113	Small Pratincole	<i>Glareola lactea</i> (444)	
114	Red-wattle Lapwing	<i>Vanellus indicus</i> (366-8)	Pharawal
115	Grey-headed Lapwing	<i>Vanellus cinereus</i> (365)	
116	Sociable Plover (Sociable Lapwing)	<i>Vanellus gregarius</i> (363)	
117	Northern Lapwing	<i>Vanellus vanellus</i> (364)	
118	Grey Plover	<i>Pluvialis squatarola</i> (371)	
119	Pacific Golden Plover	<i>Pluvialis fulva</i> (373)	
120	Greater Sand Plover	<i>Charadrius leschenaultii</i> (374)	
121	Lesser Sand Plover	<i>Charadrius mongolus</i> (384-4a)	
122	Common Ringed Plover	<i>Charadrius hiaticula</i> (378)	
123	Little Ringed Plover	<i>Charadrius dubius</i> (379-80)	Kola Katij
124	Kentish Plover	<i>Charadrius alexandrinus</i> (381-2)	
125	Eurasian Curlew	<i>Numenius arquata</i> (387-8)	
126	Whimbrel	<i>Numenius phaeopus</i> (385-6)	

127	Western Black-tailed Godwit (Black-tailed Godwit)	<i>Limosa limosa</i> (389-90)	
128	Terek Sandpiper	<i>Xenus cinereus</i> (400)	
129	Common Greenshank	<i>Tringa nebularia</i> (396)	Tot Kan
130	Wood Sandpiper	<i>Tringa glareola</i> (398)	
131	Green Sandpiper	<i>Tringa ochropus</i> (397)	
132	Common Sandpiper	<i>Actitis hypoleucos</i> (401)	
133	Marsh Sandpiper	<i>Tringa stagnatilis</i> (395)	
134	Common Redshank	<i>Tringa totanus</i> (393-4)	
135	Spotted Redshank	<i>Tringa erythropus</i> (392)	
136	Ruddy Turnstone	<i>Arenaria interpres</i> (402)	
137	Ruff (M) and Reeve (F)	<i>Philomachus pugnax</i> (426)	
138	Curlew Sandpiper	<i>Calidris ferruginea</i> (422)	
139	Dunlin	<i>Calidris alpina</i> (420-1)	
140	Temminck's Stint	<i>Calidris temminckii</i> (417)	
141	Little Stint	<i>Calidris minuta</i> (416)	Chah
142	Sanderling	<i>Calidris alba</i> (414)	
143	Red-necked Phalarope	<i>Phalaropus lobatus</i> (428)	
144	Jack Snipe	<i>Lymnocyptes minimus</i> (410)	
145	Pintail Snipe	<i>Gallinago stenura</i> (406)	Kola Kavin
146	Solitary Snipe	<i>Gallinago solitaria</i> (404)	
147	Eurasian Woodcock	<i>Scolopax rusticola</i> (411)	
148	Caspian Gull (Yellow-legged Gull)	<i>Larus cachinnans</i> (451)	
149	Great Black-headed Gull	<i>Larus ichthyaetus</i> (453)	
150	Brown-headed Gull	<i>Larus brunnicephalus</i> (454)	
151	Common Black-headed Gull	<i>Larus ridibundus</i> (455)	
152	Little Tern	<i>Sterna albifrons</i> (475-6)	
153	Common Tern	<i>Sterna hirundo</i> (464-5)	
154	Gull-billed Tern	<i>Gelochelidon nilotica</i> (460-1)	

155	River Tern	<i>Sterna aurantia</i> (463)	
156	Whiskered Tern	<i>Chlidonias hybridus</i> (458)	Kresh
157	White-winged Tern (White-winged Black Tern)	<i>Chlidonias leucopterus</i> (459)	
158	Tibetan Sand grouse	<i>Syrrhaptes tibetanus</i> (485)	
159	Chestnut-bellied Sand grouse	<i>Pterocles exustus</i> (487)	
160	Painted Sand grouse	<i>Pterocles indicus</i> (492)	
161	Rock Pigeon	<i>Columba livia</i> (516-7)	Won Kotur
162	Hill Pigeon	<i>Columba rupestris</i> (515)	
163	Yellow-eyed Pigeon	<i>Columba eversmanni</i> (518)	
164	Snow Pigeon	<i>Columba leuconota</i> (513-4)	
165	Common Woodpigeon	<i>Columba palumbus</i> (519)	
166	Speckled Woodpigeon	<i>Columba hodgsonii</i> (520)	
167	Oriental Turtle-dove	<i>Streptopelia orientalis</i> (530-33)	Kumir
168	Laughing Dove	<i>Streptopelia senegalensis</i> (541)	
169	Red Collared-dove	<i>Streptopelia tranquebarica</i> (535-6)	
170	Spotted Dove	<i>Streptopelia chinensis</i> (537-40)	
171	Eurasian Collared-dove	<i>Streptopelia decaocto</i> (534)	Kapil
172	Barred Cuckoo-dove	<i>Macropygia unchall</i> (526)	
173	Emerald Dove	<i>Chalcophaps indica</i> (542-4a)	
174	Wedge-tailed Green-pigeon	<i>Treron sphenura</i> (494)	
175	Himalayan Parakeet (Slaty-headed Parakeet)	<i>Psittacula himalayana</i> (562)	Shoga
176	Plum-headed Parakeet	<i>Psittacula cyanocephala</i> (557-8)	
177	Rose-ringed Parakeet	<i>Psittacula krameri</i> (549-50)	
178	Alexandrine Parakeet	<i>Psittacula eupatria</i> (545-8)	
179	Grey-bellied Cuckoo	<i>Cacomantis passerinus</i> (584)	
180	Banded Bay Cuckoo	<i>Cacomantis sonneratii</i> (582-3)	
181	Square-tailed Drongo-cuckoo	<i>Surniculus lugubris</i> (588-9)	

	(Drongo-Cuckoo)		
182	Jacobin Cuckoo (Pied Cuckoo)	<i>Clamator jacobinus</i> (570-1)	Zocb Kuk
183	Asian Koel	<i>Eudynamys scolopacea</i> (590-2)	
184	Indian Cuckoo	<i>Cuculus micropterus</i> (576)	
185	Common Cuckoo	<i>Cuculus canorus</i> (577-9)	
186	Oriental Cuckoo	<i>Cuculus saturatus</i> (580-0a)	
187	Small Cuckoo (Lesser Cuckoo)	<i>Cuculus poliocephalus</i> (581)	
188	Large Hawk-Cuckoo	<i>Hierococcyx sparveroides</i> (572)	
189	Common Hawk-cuckoo (Indian Hawk-Cuckoo)	<i>Hierococcyx varius</i> (573-4)	
190	Sirkeer Malkoha	<i>Phaenicophaeus leschenaultii</i> (596-8)	
191	Greater Coucal	<i>Centropus sinensis</i> (600-2)	
192	Common Barn-owl	<i>Tyto alba</i> (606-7)	
193	Tawny Fish-owl	<i>Ketupa flavipes</i> (633)	
194	Eurasian Eagle-owl	<i>Bubo bubo</i> (625-7)	
195	Northern Long-eared Owl (Long-eared Owl)	<i>Asio otus</i> (663)	
196	Short-eared Owl	<i>Asio flammeus</i> (664)	
197	Mottled Wood-owl	<i>Strix ocellata</i> (655-7)	
198	Tawny Owl	<i>Strix aluco</i> (661-2)	
199	Brown Wood-owl	<i>Strix leptogrammica</i> (658-60)	
200	Little Owl	<i>Athene noctua</i> (648-9)	Rota Megul
201	Spotted Owlet	<i>Athene brama</i> (650-2)	
202	Asian Barred Owlet	<i>Glaucidium cuculoides</i> (639-41)	
203	Collared Owlet	<i>Glaucidium brodiei</i> (635)	
204	European Nightjar (Eurasian Nightjar)	<i>Caprimulgus europaeus</i> (673)	
205	Indian Little Nightjar (Indian Nightjar)	<i>Caprimulgus asiaticus</i> (680-1)	

206	Little Swift (House Swift)	<i>Apus affinis</i> (702-6)	
207	Common Swift	<i>Apus apus</i> (696)	
208	Pacific Swift (Fork-tailed Swift)	<i>Apus pacificus</i> (699-700)	
209	Alpine Swift	<i>Tachymarptis melba</i> (693-5)	
210	White-throated Needle tail (White-throated Needle tailed Swift)	<i>Hirundapus caudacutus</i> (688)	
211	European Roller	<i>Coracias garrulus</i> (754)	Nil Krash
212	Common Hoopoe	<i>Upupa epops epops</i> (763-6)	Satut
213	White-throated Kingfisher	<i>Halcyon smyrnensis</i> (735-8)	Bud Kola Tonch
214	Himalayan Pied Kingfisher (Greater Pied Kingfisher)	<i>Megaceryle lugubris</i> (717-8)	
215	Lesser Pied Kingfisher	<i>Ceryle rudis</i> (719-20)	Hor Kola Tonch
216	Common Kingfisher	<i>Alcedo atthis</i> (722-4)	Kola Tonch
217	Chestnut-headed Bee-eater	<i>Merops leschenaulti</i> (744-5)	
218	European Bee-eater	<i>Merops apiaster</i> (746)	Tulri Khaw
219	Blue-cheeked Bee-eater	<i>Merops persicus</i> (747)	
220	Blue-tailed Bee-eater	<i>Merops philippinus</i> (748)	
221	Little Green Bee-eater (Green Bee-eater)	<i>Merops orientalis</i> (749-52)	
222	Indian Grey Hornbill	<i>Ocyroceros birostris</i> (767)	
223	Yellow-rumped Honey guide	<i>Indicator xanthonotus</i> (793-5)	
224	Coppersmith Barbet	<i>Megalaima haemacephala</i> (792)	
225	Blue-throated Barbet	<i>Megalaima asiatica</i> (788)	
226	Brown-headed Barbet	<i>Megalaima zeylanica</i> (780-2)	
227	Great Barbet	<i>Megalaima virens</i> (777)	
228	Eurasian Wryneck	<i>Jynx torquilla</i> (796)	Viri Moyt
229	Speckled Piculet	<i>Picumnus innominatus</i> (798-9)	
230	Yellow-fronted Pied Woodpecker Yellow-crowned Woodpecker	<i>Dendrocopos mahrattensis</i> (847)	
231	Brown-fronted Pied Woodpecker	<i>Dendrocopos auriceps</i> (842-3)	

	(Brown-fronted Woodpecker)		
232	Rufous-bellied Woodpecker	<i>Dendrocopos hyperythrus</i> (832-3)	
233	Himalayan Pied Woodpecker (Himalayan Woodpecker)	<i>Dendrocopos himalayensis</i> (836-7)	Hor Koil Mahot
234	Scaly-bellied Woodpecker	<i>Picus squamatus</i> (806-7)	Koil Mahot
235	Lesser Yellow nape		
236	Grey-faced Woodpecker	<i>Picus canus</i> (809-11)	
237	Black-rumped Flame back (Black-rumped Flame backed Woodpecker)	<i>Dinopium benghalense</i> (818-23)	
238	Singing Bushlark	<i>Mirafra cantillans</i> (872)	
239	Oriental Skylark (Eastern Skylark)	<i>Alauda gulgula</i> (904-9)	
240	Crested Lark	<i>Galerida cristata</i> (898-900)	
241	Bimaculated Lark	<i>Melanocorypha bimaculata</i> (892)	Dider
242	Tibetan Lark	<i>Melanocorypha maxima</i> (893-4)	
243	Horned Lark	<i>Eremophila alpestris</i> (895-7)	
244	Desert Lark	<i>Ammomanes deserti</i> (880)	
245	Greater Short-toed Lark	<i>Calandrella brachydactyla longipennis</i> (885-6)	
246	Greater Short-toed Lark		
247	Hume's Short-toed Lark	<i>Calandrella acutirostris</i> (887-8)	
248	Sand Lark (Sand Short-toed Lark)	<i>Calandrella raytal</i> (889-91)	
249	Grey-throated Sand-martin (Plain Martin)	<i>Riparia paludicola</i>	
250	Pale Sand-martin		
251	Eurasian Crag-martin	<i>Hirundo rupestris</i> (913)	
252	Asian House-martin	<i>Delichon dasypus</i> (931)	
253	Northern House-martin	<i>Delichon urbica</i> (930)	
254	Streak-throated Swallow	<i>Hirundo fluvicola</i> (922)	
255	Barn Swallow	<i>Hirundo rustica</i> (916-8)	

256	Red-rumped Swallow	<i>Hirundo daurica</i> (923-8)	
257	Wire-tailed Swallow	<i>Hirundo smithii</i> (921)	
258	Western Yellow Wagtail (Yellow Wagtail)	<i>Motacilla.flava leucocephala</i> (1875-80)	
259	Western Yellow Wagtail		
260	Western Yellow Wagtail		
261	Western Yellow Wagtail		
262	Grey Wagtail	<i>Motacilla. cinerea</i> (1884)	
263	Citrine Wagtail	<i>Motacilla.citreola citreola</i> (1881-3)	
264	Citrine Wagtail		
265	White Wagtail	<i>Motacilla. alba dukhunensis</i> (1885-90)	
266	White Wagtail		
267	White Wagtail		
268	White-browed Wagtail (Large Pied Wagtail)	<i>Motacilla. maderaspatensis</i> (1891)	
269	Olive-backed Pipit	<i>Anthus hodgsoni hodgsoni</i> (1852-3)	
270	Olive-backed Pipit		
271	Tree Pipit	<i>Anthus trivialis trivialis</i> (1854-5)	
272	Tree Pipit		
273	Red-throated Pipit	<i>Anthus cervinus</i> (1864)	
274	Rosy Pipit	<i>Anthus roseatus</i> (1865)	
275	Water Pipit	<i>Anthus spinoletta</i> (1871)	
276	Paddy field Pipit	<i>Anthus rufulus</i> (1858-60)	
277	Long-billed Pipit	<i>Anthus similis</i> (1866-9)	
278	Upland Pipit	<i>Anthus sylvanus</i> (1873)	
279	Common Wood shrike (Lesser Wood shrike)	<i>Tephrodornis pondicerianus</i> (1069-71)	
280	Black-winged Cuckoo shrike	<i>Coracina melaschistos</i> (1077)	
281	Large Cuckoo shrike	<i>Coracina macei</i> (1072-5)	

282	Long-tailed Minivet	<i>Pericrocotus ethologus</i> (1085-7)	
283	Orange Minivet (Scarlet Minivet)	<i>Pericrocotus flammeus</i> (1080-3)	Cvozul Mini
284	Small Minivet	<i>Pericrocotus cinnamomeus</i> (1090-5)	
285	Rosy Minivet	<i>Pericrocotus roseus</i> (1089)	
286	Red-vented Bulbul	<i>Pycnonotus cafer</i> (1126-32)	
287	Himalayan Bulbul	<i>Pycnonotus leucogenys</i> (1125)	Bil Bichur
288	Himalayan Black Bulbul (Black Bulbul)	<i>Hypsipetes leucocephalus</i> (1148-51)	Won Bulbul
289	Black-headed Long-tailed Shrike	<i>Lanius schach tricolor</i> (946-48)	Har Watig
290	Rufous-backed Long-tailed Shrike	<i>Lanius schach erythronotus</i>	
291	Southern Grey Shrike	<i>Lanius meridionalis</i> (933-5)	
292	Grey-backed Shrike	<i>Lanius tephronotus</i> (944-5)	
293	Isabel line Shrike (Rufous-tailed Shrike)	<i>Lanius isabellinus</i> (942-3)	
294	Bay-backed Shrike	<i>Lanius vittatus</i> (939-40)	
295	Red-backed Shrike	<i>Lanius collurio</i> (941)	
296	Yellow-bellied Fantail	<i>Rhipidura hypoxantha</i> (1450)	
297	Asian Paradise Flycatcher	<i>Terpsiphone paradisi</i> (1460-4)	
298	White-browed Fantail	<i>Rhipidura aureola</i> (1451-3)	
299	White-throated Fantail	<i>Rhipidura albicollis</i> (1454-9)	
300	Brown Dipper	<i>Cinclus pallasii</i> (1775-6)	
301	White-throated Dipper	<i>Cinclus cinclus</i> (1772-4)	Dugal
302	Grandala	<i>Grandala coelicolor</i> (1683)	
303	Chestnut-bellied Rock-thrush	<i>Monticola rufiventris</i> (1724)	
304	Blue Rock-thrush	<i>Monticola solitarius</i> (1725-6)	
305	Blue-headed Rock-thrush	<i>Monticola cinclorhynchus</i> (1723)	
306	Blue Whistling-thrush	<i>Myiophonus caeruleus</i> (1729-30)	Hazaar Dastaan
307	Black-throated Thrush (Dark-throated Thrush)	<i>Turdus ruficollis atrogularis</i> (1763-4)	

308	Red-throated Thrush	<i>Turdus ruficollis ruficollis</i>	
309	Tickell's Thrush	<i>Turdus unicolor</i> (1748)	Kostur
310	Mistle Thrush	<i>Turdus viscivorus</i> (1768)	
311	Common Blackbird (Eurasian Blackbird)	<i>Turdus merula</i> (1751-7)	
312	White-collared Blackbird	<i>Turdus albocinctus</i> (1749)	
313	Grey-winged Blackbird	<i>Turdus boulboul</i> (1750)	
314	Chestnut Thrush	<i>Turdus rubrocanus rubrocanus</i> (1758-9)	Wan Kastur
315	Plain-backed Thrush	<i>Zoothera mollissima</i> (1738-9)	
316	Small-billed Scaly Thrush (Scaly Thrush)	<i>Zoothera dauma</i> (1741-4)	
317	Northern Red-flanked Bush-robin (Orange-flanked Bush-Robin)	<i>Tarsiger cyanurus</i> (1654-6)	
318	Indian Blue Robin	<i>Luscinia brunnea</i> (1650-1)	
319	Blue throat	<i>Luscinia svecica svecica</i> (1644-6a)	
320	Blue throat		
321	Himalayan Ruby throat (White-tailed Ruby throat)	<i>Luscinia pectoralis</i> (1647-9)	
322	Oriental Magpie-Robin	<i>Copsychus saularis</i> (1661-4)	
323	Indian Black Robin (Indian Robin)	<i>Saxicoloides fulicata</i> (1717-21)	
324	Brown Rock-chat	<i>Cercomela fusca</i> (1692)	
325	Little Fork tail	<i>Enicurus scouleri</i> (1684)	
326	Spotted Fork tail	<i>Enicurus maculatus</i> (1688-9)	Shakhal Lot
327	Black Redstart	<i>Phoenicurus ochruros rufiventris</i> (1671-2)	
328	Black Redstart		
329	Eversmann's Redstart	<i>Phoenicurus erythronota</i> (1669)	
330	Blue-capped Redstart	<i>Phoenicurus coeruleocephalus</i> (1670)	
331	Blue-fronted Redstart	<i>Phoenicurus frontalis</i> (1675)	Wozul Lot

332	White-winged Redstart (Guldenstadt's Redstart)	<i>Phoenicurus erythrogaster</i> (1678)	
333	Plumbeous Water-redstart (Plumbeous Redstart)	<i>Rhyacornis fuliginosus</i> (1679)	Kola Terio
334	White-capped River-chat (White-capped Redstart)	<i>Chaimarrornis leucocephalus</i> (1716)	
335	Hodgson's Blue Robin (Hodgson's Redstart)	<i>Hodgsonius phaenicuroides</i> (1680)	
336	Isabel line Wheatear	<i>Oenanthe isabellina</i> (1706)	
337	Desert Wheatear	<i>Oenanthe deserti deserti</i> (1709-10)	
338	Pied Wheatear	<i>Oenanthe pleschanka</i> (1715)	
339	Variable Wheatear	<i>Oenanthe picata capistrata</i> (1712)	
340	Hume's Wheatear	<i>Oenanthe alboniger</i> (1714)	
341	Pied Bush chat	<i>Saxicola caprata</i> (1700-3)	
342	Common Stonechat	<i>Saxicola torquata</i> (1695-8)	Dota Tisw
343	Grey Bush chat	<i>Saxicola ferrea</i> (1705)	
344	Dark-sided Flycatcher	<i>Muscicapa sibirica</i> (1405-6)	
345	Spotted Flycatcher	<i>Muscicapa striata</i> (1403-4)	
346	Asian Brown Flycatcher	<i>Muscicapa dauurica</i> (1407)	
347	Rusty-tailed Flycatcher	<i>Muscicapa ruficauda</i> (1409)	
348	Ultramarine Flycatcher	<i>Ficedula superciliaris</i> (1421-2)	
349	Kashmir Flycatcher	<i>Ficedula subrubra</i> (1413)	
350	Red-breasted Flycatcher (Red-throated Flycatcher)	<i>Ficedula parva</i> (1411-2)	
351	Orange-gorgeted Flycatcher	<i>Ficedula strophciata</i> (1414)	
352	Slaty-blue Flycatcher	<i>Ficedula tricolor</i> (1423-5)	
353	Snowy-browed Flycatcher	<i>Ficedula hyperythra</i> (1417)	
354	Blue-throated Flycatcher	<i>Cyornis rubeculoides</i> (1440)	
355	Rufous-bellied Niltava	<i>Niltava sundara</i> (1431-2)	
356	Verditer Flycatcher	<i>Eumyias thalassina</i> (1445)	

357	Variegated Laughing thrush	<i>Garrulax variegatus</i> (1289-90)	Sheena Pippin
358	Yellow-eyed Babbler	<i>Chrysomma sinense</i> (1230-2)	
359	Black-chinned Babbler	<i>Stachyris pyrrhops</i> (1211)	
360	Common Babbler	<i>Turdoides caudatus</i> (1253-4)	
361	Jungle Babbler	<i>Turdoides striatus</i> (1261-5)	
362	Rusty-cheeked Scimitar-babbler	<i>Pomatorhinus erythrogenys</i> (1181-3)	
363	Red-billed Mesia (Red-billed Leiothrix)	<i>Leiothrix lutea</i> (1335-7)	
364	Rufous Sibia	<i>Heterophasia capistrata</i> (1396-8)	
365	White-browed Shrike-babbler	<i>Pteruthius flaviscapis</i> (1341)	
366	Winter Wren (Northern Wren)		
367	Puff-throated Babbler	<i>Pellorneum ruficeps</i> (1152-9)	
368	Ashy Prinia	<i>Prinia socialis</i> (1515-8)	
369	Grey-breasted Prinia	<i>Prinia hodgsonii</i> (1502-5)	
370	Jungle Prinia	<i>Prinia sylvatica</i> (1519-23)	
371	Plain Prinia	<i>Prinia inornata</i> (1510-4)	
372	Rufous-fronted Prinia	<i>Prinia buchanani</i> (1506)	
373	Striated Prinia (Brown Hill Prinia)	<i>Prinia criniger</i> (1526-8)	
374	Graceful Prinia	<i>Prinia gracilis</i> (1508-9)	
375	Strong-footed Bush-warbler (Brown-flanked Bush-Warbler)	<i>Cettia fortipes</i> (1477-8)	Dota Pich
376	Grey-sided Bush-warbler	<i>Cettia brunnifrons</i> (1485-7)	
377	Spotted Bush-warbler	<i>Bradypterus thoracicus</i> (1489-90)	
378	Long-billed Bush-warbler	<i>Bradypterus major</i> (1491)	
379	Moustache Warbler	<i>Acrocephalus melanopogon</i> (1495)	
380	Indian Reed-warbler (Clamorous Reed-Warbler)	<i>Acrocephalus stentoreus brunnescens</i> (1550-2)	Kur Kokh
381	Blyth's Reed-warbler	<i>Acrocephalus dumetorum</i> (1556)	
382	Paddy field Warbler	<i>Acrocephalus agricola</i> (1557-8)	

383	Blunt-winged Reed-warbler	<i>Acrocephalus concinens stevensi</i> (1559-60)	
384	White-browed Tit-warbler (Stoliczka's Tit-Warbler)	<i>Leptopoecile sophiae</i> (1633-4)	
385	Common Tailorbird	<i>Orthotomus sutorius</i> (1535-9)	
386	Grey-hooded Warbler	<i>Seicercus xanthoschistos</i> (1617)	
387	Whistler's Warbler	<i>Seicercus whistleri</i> (1614)	
388	Grey-headed Canary-flycatcher (Grey-headed Flycatcher)	<i>Culicicapa ceylonensis</i> (1448-9)	
389	Siberian Chiffchaff (Common Chiffchaff)	<i>Phylloscopus collybita tristis</i> (1574-5)	
390	Mountain Chiffchaff	<i>Phylloscopus sindianus</i> (1576)	
391	Plain Leaf-warbler	<i>Phylloscopus neglectus</i> (1577)	Visi Terio
392	Dusky Warbler	<i>Phylloscopus fuscatus fuscatus</i> (1584-6)	
393	Sulphur-bellied Warbler	<i>Phylloscopus griseolus</i> (1581)	
394	Tickell's Leaf-warbler	<i>Phylloscopus affinis</i> (1579)	
395	Tytler's Leaf-warbler	<i>Phylloscopus tytleri</i> (1578)	
396	Greenish Warbler		
397	Large-billed Leaf-warbler	<i>Phylloscopus magnirostris</i> (1601)	
398	Blyth's Leaf-warbler	<i>Phylloscopus reguloides</i> (1608-11)	
399	Western Crowned Warbler	<i>Phylloscopus occipitalis</i> (1606)	
400	Hume's Leaf-warbler (Hume's Warbler)	<i>Phylloscopus humei</i> (1590-1)	
401	Brooks's Leaf-warbler	<i>Phylloscopus subviridis</i> (1593)	
402	Orange-barred Leaf-warbler (Buff- barred Warbler)	<i>Phylloscopus pulcher</i> (1587-9)	
403	Lemon-rumped Leaf-warbler	<i>Phylloscopus chloronotus</i> (1594-6)	
404	Grey-faced Leaf-warbler (Ashy- throated Warbler)	<i>Phylloscopus maculipennis</i> (1597-9)	
405	Common Whitethroat (Greater Whitethroat)	<i>Sylvia communis</i> (1566)	

406	Lesser Whitethroat	<i>Sylvia curruca halimodendri</i> (1567-8)	
407	Rufous-vented Tit	<i>Parus rubidiventris</i> (1805-8)	
408	Rufous-naped Tit	<i>Parus rufonuchalis</i> (1804)	
409	Spot-winged Tit	<i>Parus melanolophus</i> (1802)	
410	Grey-crested Tit (Brown Crested Tit)	<i>Parus dichrous</i> (1807-8)	
411	Great Tit	<i>Parus major</i> (1790-7)	Rang Tsar
412	Green-backed Tit	<i>Parus monticolus</i> (1799)	
413	Red-headed Tit (Chestnut-capped Tit)	<i>Aegithalos concinnus</i> (1818-20)	
414	White-cheeked Tit	<i>Aegithalos leucogenys</i> (1821)	
415	White-throated Tit	<i>Aegithalos niveogularis</i> (1822)	
416	Black-lored Yellow Tit	<i>Parus xanthogenys</i> (1809-11)	
417	Bar-tailed Tree creeper	<i>Certhia himalayana</i> (1845-8)	
418	Eurasian Tree creeper	<i>Certhia familiaris hodgsoni</i> (1842-4)	
419	Yellow-browed Tit	<i>Sylviparus modestus</i> (1813-4)	
420	Wall creeper	<i>Tichodroma muraria</i> (1839)	
421	Fire-capped Tit	<i>Cephalopyrus flammiceps</i> (1815-6)	
422	Kashmir Nuthatch	<i>Sitta cashmirensis</i> (1824)	
423	White-cheeked Nuthatch	<i>Sitta leucopsis</i> (1832-3)	
424	Fire-breasted Flower pecker	<i>Dicaeum ignipectus</i> (1905)	
425	Oriental White-eye	<i>Zosterops palpebrosus</i> (1933-6)	
426	Purple Sunbird	<i>Nectarinia asiatica</i> (1916-8)	
427	Crimson Sunbird	<i>Aethopyga siparaja</i> (1927-9a)	
428	Altai Accentor	<i>Prunella himalayana</i> (1780)	
429	Alpine Accentor	<i>Prunella collaris</i> (1777-9)	
430	Robin Accentor	<i>Prunella rubeculoides</i> (1781)	
431	Rufous-breasted Accentor	<i>Prunella strophciata</i> (1782-3)	

432	Black-throated Accentor	<i>Prunella atrogularis</i> (1786-7)	
433	Brown Accentor	<i>Prunella fulvescens</i> (1784-5)	
434	Crested Bunting	<i>Melophus lathamii</i> (2060)	
435	Thick-billed Reed Bunting	<i>Emberiza schoeniclus pyrrhuloides</i>	
436	Reed Bunting	<i>Emberiza schoeniclus pallidior</i> (2058-9)	
437	Little Bunting	<i>Emberiza pusilla</i> (2056)	
438	White-capped Bunting	<i>Emberiza stewarti</i> (2048)	
439	Chestnut-eared Bunting	<i>Emberiza fucata</i> (2055-5a)	
440	Rock Bunting	<i>Emberiza cia par</i> (2051-2)	
441	Pine Bunting	<i>Emberiza leucocephalus</i> (2042)	
442	Red-headed Bunting	<i>Emberiza bruniceps</i> (2044)	
443	Grey-necked Bunting	<i>Emberiza buchanani</i> (2050)	
444	Ortolan Bunting	<i>Emberiza hortulana</i> (2049)	
445	Plain Mountain-finch (Hodgson's Mountain-finch)	<i>Leucosticte nemoricola</i> (1999-2000)	
446	Brandt's Mountain-finch	<i>Leucosticte brandti</i> (2001-5)	
447	Plain-backed Snow finch	<i>Pyrgilauda blanfordi</i> (1955)	
448	Black-winged Snow finch (Adam's Snow finch or Tibetan Snow finch)	<i>Pyrgilauda adamsi</i>	
449	European Linnet (Eurasian Linnet)	<i>Carduelis cannabina</i> (1994)	
450	Twit	<i>Carduelis flavirostris</i> (1995-6)	
451	Himalayan Greenfinch (Yellow-breasted Greenfinch)	<i>Carduelis spinoides</i> (1990, 1992)	
452	Fire-fronted Serine	<i>Serinus pusillus</i> (1998)	
453	Eurasian Goldfinch (European Goldfinch)	<i>Carduelis carduelis</i> (1987-9)	
454	Red-browed Finch (Spectacled Finch)	<i>Callacanthus burtoni</i> (1997)	
455	Brambling	<i>Fringilla montifringilla</i> (1980)	
456	Mongolian Finch	<i>Bucanetes mongolicus</i> (2007)	

457	Common Rose finch	<i>Carpodacus erythrinus roseatus</i> (2010-3)	
458	Common Rose finch		
459	Pink-browed Rose finch	<i>Carpodacus rodochrous</i> (2017)	
460	Blyth's Rose finch (Red-mantled Rose finch)	<i>Carpodacus grandis</i>	
461	Red-fronted Rose finch (Red-breasted Rose finch)	<i>Carpodacus puniceus</i> (2029-31)	
462	Streaked Great Rose finch (Eastern Great Rose finch)	<i>Carpodacus rubicilloides</i> (2028)	
463	Spotted Great Rose finch (Great Rose finch)	<i>Carpodacus rubicilla</i>	
464	Himalayan White-browed Rose finch (White-browed Rose finch)	<i>Carpodacus thura</i> (2020-2)	
465	Dark-breasted Rose finch	<i>Carpodacus nipalensis</i> (2014-5)	
466	Red Crossbill	<i>Loxia curvirostra</i> (2032)	
467	Red-headed Bullfinch	<i>Pyrrhula erythrocephala</i> (2039)	
468	Orange Bullfinch	<i>Pyrrhula aurantiaca</i> (2040)	
469	Hawfinch	<i>Coccothraustes coccothraustes</i> (1981)	
470	Black-and-yellow Grosbeak (Western Black and Yellow Grosbeak)	<i>Mycerobas icteroides</i> (1982)	
471	Collared Grosbeak (Eastern Black and Yellow Grosbeak)	<i>Mycerobas affinis</i> (1983)	
472	White-winged Grosbeak	<i>Mycerobas carnipes</i> (1984-5)	
473	Spot-winged Grosbeak	<i>Mycerobas melanozanthos</i> (1986)	
474	Red Avadavat (Red Munia)	<i>Amandava amandava</i> (1964)	
475	Indian Silver bill (Plain Munia)	<i>Lonchura malabarica</i>	
476	Scaly-breasted Munia	<i>Lonchura punctulata</i> (1974-5)	
477	House Sparrow	<i>Passer domesticus</i> (1938-9a)	
478	Eurasian Tree Sparrow	<i>Passer montanus</i> (1941-4)	
479	Cinnamon Sparrow (Russet	<i>Passer rutilans</i> (1946-7)	

	Sparrow)		
480	Spanish Sparrow	<i>Passer hispaniolensis</i> (1940)	
481	Rock Sparrow (Rock Petronia)	<i>Petronia petronia</i> (1950)	
482	Indian Baya Weaver (Baya Weaver)	<i>Ploceus philippinus philippinus</i> (1957-9)	
483	Streaked Weaver	<i>Ploceus manyar</i> (1962-3)	
484	European Golden Oriole (Eurasian Golden Oriole)	<i>Oriolus oriolus</i> (952-3)	Posh Nul
485	Black Drongo	<i>Dicrurus macrocercus</i> (962-4)	
486	Ashy Drongo	<i>Dicrurus leucophaeus</i> (965-6b)	Tele Kot
487	Common Starling	<i>Sturnus vulgaris</i> (997-1001)	Tsini Hangur
488	Brahminy Starling	<i>Sturnus pagodarum</i> (994)	
489	Rosy Starling	<i>Sturnus roseus</i> (996)	
490	Asian Pied Starling	<i>Sturnus contra</i> (1002-4)	
491	Bank Myna	<i>Acridotheres ginginianus</i> (1008)	
492	Common Myna	<i>Acridotheres tristis</i> (1006-7)	Hor
493	Jungle Myna	<i>Acridotheres fuscus</i> (1009-11)	
494	Spotted Nutcracker	<i>Nucifraga caryocatactes</i> (1042-4)	
495	Ground-tit (Hume's Ground pecker)	<i>Pseudopodoces humilis</i> (1041)	
496	Eurasian Jackdaw	<i>Corvus monedula</i> (1053)	Kavin
497	Red-billed Chough	<i>Pyrrhocorax pyrrhocorax</i> (1046-7)	Wan Kavin
498	Alpine Chough (Yellow-billed Chough)	<i>Pyrrhocorax graculus</i> (1045)	
499	Rook	<i>Corvus frugilegus</i> (1052)	
500	Carrion Crow	<i>Corvus corone</i> (1058-8a)	
501	House Crow	<i>Corvus splendens</i> (1048-51)	Kav
502	Indian Jungle Crow (Jungle Crow)	<i>Corvus macrorhynchos culminatus</i> (1054-7)	Diva Kav
503	Common Raven	<i>Corvus corax tibetanus</i> (1059-60)	Botin Kav

504	Eurasian Magpie (Black-billed Magpie)	<i>Pica pica (1029-30)</i>	
505	Eurasian Jay	<i>Garrulus glandarius (1020-1)</i>	
506	Black-headed Jay	<i>Garrulus lanceolatus (1022)</i>	
507	Yellow-billed Blue Magpie	<i>Urocissa flavirostris (1025-6)</i>	Lota Raza
508	Rufous Tree pie	<i>Dendrocitta vagabunda (1030a-4)</i>	
509	Tibetan Snow finch	<i>Pyrgilauda adamsi</i>	