

WILDLIFE AND NATIONAL PARK LEGISLATION IN ASIA

a Comparative Study

prepared by

G. Kropp

Forestry, Wildlife and Fisheries Legislation Section
LEGISLATION BRANCH, LEGAL OFFICE

in cooperation with

Forest Conservation and Wildlife Branch
Forest Resources Division

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FOREWORD

The purpose of this paper is to present a comparative study on wildlife, national parks, forest recreation and hunting legislation in Asia and the Far East, so as to provide information and guidance in the improvement of national legislation in that region.

The desire to have such a study carried out was first expressed in a recommendation of the Bangkok Conference on Conservation in Tropical South East Asia, 1965, organized by the International Union for Conservation of Nature (IUCN), in these terms: (The Conference) "recommends that through appropriate channels such as the IUCN Commission on Legislation and the Legislation Research Branch of FAO, summaries of existing laws having been collected and listed should be made available to Governments, departments and organizations concerned, supported by suggested model legislation, based on a comparative study of the material, to facilitate future revision and co-ordination(1)."

FAO subsequently decided that similar comparative studies should be undertaken on the legislation of countries in Asia and the Far East and Latin America(2).

During the preparation of this study it was felt necessary - in order to obtain a better understanding of the problems of wildlife and national parks - to visit some of the countries included in this study, namely, Indonesia, Singapore, Malaysia, Thailand, India and Nepal, on a two months' fact-finding mission which included discussions on legislative and administrative matters concerning wildlife with people in the departments concerned, as well as visits to sanctuaries and national parks.

The study has been divided into eleven chapters; two annexes indicate various hunting licences and hunting methods in the countries covered by the study, and an index lists the acts which have been used in the preparation of this document.

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- (1) Proceedings of the Conservation in Tropical South East Asia, p.418
 - (2) "Wildlife and National Park Legislation in Latin America - A Comparative Study", prepared by Forestry, Wildlife and Fisheries Legislation Section, Legislation Branch, in co-operation with the Forestry Conservation and Wildlife Branch, FAO, 1971.

I. INTRODUCTION

Purpose of wildlife and national park legislation

One of the main purposes of wildlife and national park legislation should be to formulate and establish conservation and management policy and to secure its implementation. Conservation is necessary to ensure that parts of man's natural environment shall not disappear; similarly necessary is wise resource management on a continuing stable basis with the objective of developing wildlife and related natural resources in such a way that they may contribute to overall economic and social development. More specifically, conservation and management of wildlife and national parks imply a rational land use policy, development of the wildlife and national park resource for purposes of recreation, science and tourism, and a wise management of these assets, i.e. regulated hunting, adequately restricted trade in wildlife and wildlife products, protection of species threatened with extinction and maintenance of the wildlife habitat.

The protection and management of protected areas and wildlife form an integral part of a larger problem, namely the management of wild and marginal lands as part of a rational land use programme. However, lands suitable for the purpose of protected areas and management of wildlife are becoming more and more scarce as a result of an increased population density and a rapidly advancing technology. In fact, more and more land is to-day affected by various forms of habitat destruction and this gives great cause for concern as a serious obstacle to the proper protection and management of the resource.

Increasing emphasis is given at present to the rôle of the wildlife resource as a source for food and trade, the aim being to manage the resource in such a way as to ensure an optimum sustained yield rather than a once-and-for-all destructive exploitation. Such rational use of wildlife also implies land use planning. Thus, on a given land, it may be wiser to harvest the products of the wild fauna rather than to introduce domestic livestock, which may be unable to use the same land as productively on a sustained basis. Further, an adequately regulated trade in wildlife products may contribute to the economic development of the country concerned.

The management of wildlife implies another important aspect, namely the preservation for economic, aesthetic, cultural and scientific reasons of those animal species which are rare or threatened with extinction. Among the animals on the verge of extinction in Asia and the Far East may be mentioned the rhinoceros, the orang-utang, and the bird of paradise. An increased awareness among governments and various international organisations will hopefully result in adequate measures being taken to stop the depletion of the flora and fauna resource, bearing in mind that the resource forms an important part of the human environment.

Protected areas represent a source of national pride, a place for the general public to enjoy their leisure hours as well as a basis for improving income from the tourist trade. The aim should therefore be to introduce better management practices, to develop tourist facilities and to increase the flow of tourism and direct it in harmony with national or regional plans.

Sources used in the study

This study is based on legislation from Australia, Burma, Cambodia, Ceylon, Hong Kong, India, Indonesia, Iran(1), Malaysia, Nepal, New Zealand, Pakistan, Philippines, Singapore, Taiwan and Thailand. The authorities in Afghanistan, Bhutan, some states in India, Taiwan and Vietnam (North and South) - countries which were also to be included in the study - were unable to provide the relevant legislation and documentation.

(1) Only extracts from The Game Laws and Regulations were available

II. SOME MAIN CHARACTERISTICS OF LEGISLATION IN THE REGION

International Convention in Force

The London Convention of 1933 (Convention relative to the preservation of fauna and flora in their natural state) seems to have had little influence in the formulation and application of legislation in Asia and the Far East. India is the only country in the region to have adhered to the Convention. This does not seem, however, to have had any noticeable influence on her legislation.

Division of competence in Federal Countries

The Federal States of Australia and India, which constitute the Commonwealth of Australia and the Republic of India, respectively, do not so far have a uniform wildlife legislation within the federations. In Australia, however, the laws from the six states, plus the Territory of Papua and New Guinea, do not essentially differ. So far as quality and completeness of Indian legislation is concerned, the differences are mere apparent. In the Commonwealth of Australia the responsibility for enacting wildlife legislation remains with the states. The Federal Constitution enumerates the subjects where the law-making power is exclusively laid upon the Federal Parliament but does not mention anything about wildlife legislation or related fields(1). The Indian Constitution delegates law-making powers to the states within the Federation as regards the protection of wild animals and birds, as well as forests and fishing(2).

In the Federation of Malaysia the Constitution lays down that protection of wildlife and matters related to national parks is a question to be dealt with both by the Federal authorities and the State Government concerned(3). Unlike Australia and India, there is only one wildlife act for the whole country to which all rulers of the Malay States have assented. However, the National Parks Ordinance of the Colony of North Borneo (Sabah) applies only to that state.

Nature of legislation

A country or - as in Australia and India - a state within a Federation normally possesses an act dealing with fauna, sometimes including flora conservation. National park acts are not met with so frequently. However, in Australia there is a national park act for every state. Some Indian states (Madhya Pradesh and Uttar Pradesh) and the Malaysian State of Sabah also have their own individual acts. For the rest, it seems that only Indonesia, New Zealand, Philippines and Thailand possess national park acts. It should, however, be mentioned that Cambodia and Ceylon have provisions on national parks incorporated into their fauna and flora protection acts. The Nepalese Hunting Rules make it possible to declare certain areas as national parks, although so far none has been set aside. The Taman Negara Enactment, Malaysia, refers only to the national park of Taman Negara.

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- (1) Art. 51 and 52
 - (2) Art. 246(3) and List II 19-20
 - (3) Art. 79 Annex IX List III

Many countries have made quite comprehensive regulations or rules under a basic fauna protection act. These regulations, which supplement the main document, often include provisions of sometimes as great an importance as the main act itself.

Territorial application of legislation

In some countries the relevant legislation is found to be limited in application to certain areas of the national territory. Thus, in India many fauna protection laws refer only to so-called reserved and protected forests (as, for instance, in Assam, Madras, Himachal Pradesh), leaving the fauna outside these areas, sanctuaries and national parks unprotected. Similarly, in West Pakistan, existing legislation covers only part of the country, leaving most of the unsettled areas ("special areas" mainly situated west of the Indus) without any wildlife protection at all(1). In East Pakistan the legislation, as its title implies, is limited in its application to "the controlled and vested forests". In Indonesia the hunting ordinance and regulations only apply to Java and Madura(2).

Objectives of legislation

The objectives of the laws are seldom clearly formulated, although there are some exceptions(3). Often there is a rather vague general statement to the effect that the purpose of the act is the conservation and management of the fauna. Usually, the aim of the act is not clearly stated but may be deduced from its provisions.

Some of the laws collected are somewhat out-dated and it is questionable whether some or all of them are being applied. The assumptions and conclusions in this study should therefore be seen in this light. Some laws now in force will in the near future be obsolete, since draft laws are awaiting the final approval (Indonesia, Nepal and Taiwan). Other draft laws in an early stage of preparation are being circulated for comment (Wildlife Protection and National Parks Act, India).

III. ADMINISTRATION

To ensure the implementation of a sound conservation policy and to prevent infringements of wildlife and national park legislation, effective administration and management of nature conservation is of the greatest importance. The different levels of responsibility regarding administration and management may be divided into three categories: the ministerial, departmental and local levels. The first two will be dealt with under the same sub-heading.

At Ministerial and Departmental levels

In most countries the administration of the wildlife legislation acts is the responsibility of either the Minister of Agriculture or the Minister of Forestry. Sometimes it is not evident from the acts examined under which ministry wildlife conservation and national parks fall. However, it seems most likely that the Ministries of Agriculture and Forestry are charged with the responsibility of administering matters dealing with wildlife conservation and national parks even where this is not specifically mentioned in the respective acts.

(1) 72. (refer to the act corresponding to the same number in the Index) Sec. 1(2)

(2) 32. Art. 18

(3) 1. Preamble, 7. Preamble, 68. Sec. 3

In Australia the persons responsible for the administration of the nature conservation acts are as follows: the Minister of Agriculture(1) (South Australia and Queensland), the Chief Warden of Fauna, who is subject to the direction and control of the Minister for Fisheries and Fauna and the Director of Fisheries and Fauna (2), (Western Australia), the Chief Inspector of Wildlife, who is subject to the direction of the Administrator in Council (3), (Northern Territory), the Conservator, who is similarly subject to any directions of the Administrator (4), (Papua and New Guinea) and the Governor (5) (Tasmania). As to Victoria and New South Wales the Minister (not specified) is responsible for the administration (6). However, the Chief Minister of Victoria himself (the Premier) administers the National Park Act (7).

In South Australia the Minister of Agriculture must prepare and lay before the Parliament the annual report of the administration of the Act. The Minister may order the Director and Chief Inspector of Fisheries (who is designated as the Director of Fauna Conservation) to carry out work relating to conservation, propagation and management of animals(8). In New South Wales, the Director of National Parks and Wildlife is directly responsible to the Minister and thus subject to his control and direction. The Director, officers, employees and servants engaged in the administration form the National Parks and Wildlife Service, the functions of which are to carry out work and activities for the preservation and protection of national parks(9). In Victoria, the Minister may delegate specified powers to the Director of Fisheries and Wildlife. Regarding national parks, there is a National Parks Authority which is responsible for the management and control of the national parks(10). Similar bodies appear in the majority of Australian national park acts, and also in those of New Zealand.

In New Zealand the wildlife act is administered by the Minister of Internal Affairs. His general powers are to prepare and carry out wildlife surveys, to use and develop land as wildlife sanctuaries or as wildlife refuges, and to co-ordinate the policies and activities of other Government departments, acclimatisation societies, local authorities and public bodies in relation to the protection, management, control and conservation of wildlife(11). However, the Governor General declares sanctuaries (by joint recommendation with the Minister, if Crown land is affected) and may impose restrictions regarding right of entry and hunting and killing animals in sanctuaries(12).

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- (1) 5. Sec. 8 and 23. Sec. 7
 - (2) 8. Sec. 7(1)
 - (3) 19. Sec. 6(1)
 - (4) 15. Sec. 8
 - (5) 12. Sec. 6
 - (6) 2. 21 and 33 and 1. Sec. 4(12)
 - (7) 3. Sec. 4(2)
 - (8) 5. Sec. 11 and 12.
 - (9) 1. Sec. 5(4) and 6.
 - (10) 3. Sec. 9
 - (11) 67. Sec. 41
 - (12) 67. Sec. 9

In the Federation of India the chief organisation is the Ministry of Food and Agriculture. The Forest Department within the Ministry is responsible for wildlife conservation and national parks in the country. The Forest Departments in each state are charged with nature conservation within the respective state. In a number of states the Wildlife Preservation Officer appointed by the State Government is the highest authority(1). National parks are created by an act of the federal legislature, while the various State Governments declare a specified area to be a game sanctuary.

At Local level

(a) Game wardens, rangers, etc.

All wildlife legislation in Asia and the Far East provides for the appointment of game wardens, rangers, etc., charged with enforcing the provisions laid down in the acts. The powers of these officers are mostly evident from the acts and do not essentially differ from each other. In order to give the officers an increased protection against all kinds of physical violence or insults, it is sometimes laid down that they shall be deemed to be public servants whom nobody shall assault or resist by force in the execution of their duties(2).

In South Australia inspectors, honorary wardens and other officers may be appointed. A member of the police force is ex-officio designated an inspector. The instrument of appointment of an honorary warden may prescribe limitations on his powers so that to this extent he is not vested with entirely the same authority as an inspector(3). There is an essential difference in the powers of inspectors and honorary wardens. While an honorary warden may only enquire a suspected person's name, or inspect a licence or permit, an inspector may, in addition, though subject to certain conditions, arrest the suspected person, enter and search any land, building or vehicle, and seize animals and hunting equipment(4).

In Queensland(5) fauna officers may be appointed. Members of the police force (similar to South Australia), forest officers and a number of various enumerated officers are, by virtue of their office, appointed fauna officers. Honorary protectors may be appointed. Appointed officers may be assigned to a certain area or a fauna district, within which they exercise their powers and duties. The powers vested in a fauna officer or an honorary protector are essentially the same as those given to an inspector or to an honorary warden in South Australia..

The legislation of Western Australia(6) lays down that all persons serving as Chief Warden of Fauna, members of the police force and forest officers shall automatically be wardens. A certificate of authority is issued to each warden entitling him to do everything which he is required or authorised to do by the act and regulations. Honorary wardens may be appointed.

(1) For instance, 34. Sec. 4, 36. Sec. 4 and 45. Sec. 4

(2) " " 5. Sec. 18, 19. Sec. 11, 34. Sec. 51, 36. Sec. 52
45. Sec. 46 and 67. Sec. 40

(3) 5. Sec. 13(3)

(4) 5. Sec. 15

(5) 23. Sec. 8-9

(6) 8. Sec. 19-21

The legislation of the Northern Territory speaks only in terms of honorary rangers. Members of the police force, welfare officers and stock inspectors are by virtue of their office considered honorary rangers. A warrant card is issued to each ranger, which gives him all the powers and duties of a constable under common law(1).

In the Territory of Papua and New Guinea rangers are given similar authority as inspectors in South Australia(2).

In Victoria the inspector of fisheries or any assistant or any member of the police force is authorised to search for and seize any game, as well as to seize any hunting equipment used when killing or destroying any game(3).

In New Zealand suitable persons may for a term not exceeding three years be appointed rangers either for a particular district or generally throughout the country(4). Honorary rangers may also be appointed. As under Australian laws, every constable is by virtue of his office deemed to be a ranger. The powers given to a ranger are almost identical with those of an inspector in South Australia(5). In the performance of his official duties a ranger may call upon any male person above the age of eighteen years to assist him when necessary. A refusal is considered to be an offence.

In India the direct management of wildlife and national parks at the local level is carried out by game wardens, forest officers, rangers, etc. Their powers are mostly set out in the acts and do not essentially differ from those described above(6).

In the Philippines, all forest officers are automatically game wardens. Deputy game wardens include members of the police force, land inspectors, land surveyors, other competent officers and employees, etc. Duties for both categories are, briefly, to enforce the provisions of the Act for the protection of game and fish, to ascertain whether persons engaged in hunting have the requisite licences, to arrest persons committing offences under the Act, to seize any equipment used in violation of the Act and to report all violations(7).

In Malaysia there are game wardens, deputy game wardens, assistant game wardens, honorary deputy game wardens and game rangers. These officers may, if any person is seen or found committing an offence under the Act, stop and detain such a person; under certain circumstances he may be arrested. Search and seizure of animals and weapons may take place when there is reasonable cause to believe that an offence has been committed(8).

In Thailand the Minister of Agriculture may appoint the officials but their powers are not regulated in the Act.

(1) 19. Sec. 8 and 9.

(2) 15. Sec. 23

(3) 2. Sec. 18 and 19

(4) 67. Sec. 36

(5) 67. Sec. 39

(6) For instance, 34, Sec. 44, 36. Sec. 44 and 45. Sec. 38

(7) 75. Sec. 12

(8) 60 Sec. 56.58

In Ceylon, wardens, district wardens, honorary district wardens and such other officers and servants may be appointed as required from time to time. The powers of these officers are set out in the Act(1). In addition, the ordinary citizen may under law require anybody offending against the Act to state his name and place of abode(2).

In Burma, forest officers, game wardens and police officers may intervene for the purpose of preventing the commission of any offence under the Act. Under certain conditions, the same officers may arrest persons and seize their hunting implements and the carcasses of any animals killed. The above-mentioned officers may be vested with the powers of a civil court to compel the attendance of witnesses and the production of documents, including powers to hold enquiries into offences and to receive and record evidence(3).

Responsibility for the protection of fauna in Cambodia lies with the Waters, Forests and Wildlife Service. Offences under the Act are dealt with by forest officers, police officers and certain other authorised persons. Forest officers may search for and seize animals and weapons, etc.(4).

(b) Advisory bodies

Some laws have created advisory bodies for the purpose of giving advice concerning wildlife preservation, national parks and related matters. The members of these bodies are usually high-ranking state officers, many of them having botanical, zoological and legal competence. These advisory bodies do not normally have executive functions but may enquire into wildlife matters and report to the Minister or Director of the department concerned, who makes the final decision.

In Australia advisory bodies are provided for in the legislation of some of the states. The Western Australian Wildlife Authority has an advisory function but its most important task is to prepare a detailed written scheme for each classified sanctuary of the operations which the Authority proposes to undertake in relation to that area, the object of the scheme mainly being the maintenance, study, care and restoration of the natural environment and protection and care of fauna(5). The functions of the Wildlife Advisory Council in the Northern Territory are mainly to make recommendations on the administration of the wildlife ordinance and, in particular, measures to be taken for conservation of animals and species of animals, declaration of sanctuaries, the manner of controlling sanctuaries, and research and investigation into wildlife(6).

The acclimatisation societies in New Zealand seem to be in a somewhat more independent position since they are also empowered with executive functions.(7)

Subordinate to the Indian Board for Wildlife - which is an advisory board at the federal level - there are in some states Wildlife Advisory Boards, the purposes of which are: (a) to advise the State Government in the selection of areas to be declared as sanctuaries; (b) to formulate the policy in granting licences and permits and administration of sanctuaries; (c) to frame rules; and (d) to deal with any matter

(1) 28. Sec. 25

(5) 8. Sec. 12D

(2) 28. Sec. 33

(6) 19. Sec. 13

(3) 25. Sec. 14-16 and 26.

(7) 67. Sec. 30

(4) 27. Sec. 42-45

connected with the preservation and protection of animals and birds(1). In the State of Punjab the District Fauna Committee advises generally on the protection of wildlife in the district(2).

In Thailand the Wild Animal Reservation and Protection Committee gives advice regarding close seasons and areas where game animals may be hunted, as well as wild animal preservation areas and activities to be carried out for the purpose of maintaining such areas(3).

In Ceylon there is an advisory committee to advise the Warden and make recommendations to the Minister on all matters relating to the fauna and flora(4).

Conclusions

The study tour in Asia and the Far East showed that wildlife conservation was not always given sufficient attention in the departments concerned due to lack of resources and trained personnel. Seldom was there a section or administrative unit in charge of wildlife and national parks within the Government department concerned. It was more usual to find that only one or two officers provided the administrative support. This is unfortunate because it is essential that these departments shall have well-defined units with sufficiently trained personnel. A strengthening of the existing wildlife administration and establishment of such well-defined units where these are non-existent would lead to considerable improvements for conservation in its broadest connotation. There also seems to be a lack of awareness on the part of some Governments of the need for establishing a well-defined wildlife and management policy. The necessary lead does not seem to be forthcoming from these ministries which, according to the existing legislation, have the responsibility for the conservation and rational use of these resources.

At the local level, management personnel, such as game wardens and rangers would seem to be vested with sufficient powers. However, it is questionable - and this will be seen below - whether their numbers are sufficient or whether adequate legal measures really can be taken to deal with infringements of the conservation laws.

IV. TYPES AND CHARACTERISTICS OF PERMITS AND LICENCES

The legislation in all the countries in the region provides that the hunting of wild animals - with the exception of pests, vermin or noxious animals - is prohibited except under a hunting licence or permit. Licences are usually personal and may not be transferred to, or used by, others. An exception is the Madhya Pradesh Forest Rules in India which limits to four the number of sportsmen who may hunt on any one permit(5).

Applicants in many cases are required to give on a printed form particulars of locality, period, species and weapons to be used. The licence is usually issued by an officer on payment of a prescribed fee, and may be subject to limitations, restrictions, and terms

(1) 34. Sec. 7, 36. Sec. 7

(2) 41. Sec. 21

(3) 81. Sec. 33

(4) 28. Sec. 70

(5) 58. Sec. 15

and conditions such as the species and number of animals which may be captured or hunted, and the areas or places where the animals may be hunted. It is provided in some countries that an officer may for good and sufficient reasons refuse to issue a licence. During the period of validity, the licence may be suspended or revoked if the licensee fails to comply with prescribed conditions. Sometimes it is specifically stated that the licensee must keep a record of the game killed during the period of validity of the licence. Upon expiry of the licence, this record is submitted to the issuing authority. The licensee may have to accept the inspection of the carcass by an officer.

A licence is normally valid for one year and is renewable, but it does not give the holder the right to hunt within sanctuaries, reserves or national parks. (This may, however, be permissible in exceptional cases under a special permit). In order to obtain a hunting licence many legislative bodies provide that the applicant must possess a licence to keep firearms. The conditions described here refer in the main to sporting game licences but are also partially applicable to scientific hunting licences and commercial capture and trade licences.

Hunting may take place on public lands but also sometimes on private lands provided the hunter has first obtained the consent of the proprietor(1). In Queensland it is explicitly laid down that open season fauna permits, licences, certificates or any other authority under the Act do not give any right of entry upon privately owned lands. There is, however, in the latter case no reason to believe that the owner himself may freely dispose of the wild fauna on his lands, since all fauna is the property of the State(2).

Regarding the different types of hunting licences in various countries, see Annex 1.

Sporting game licences

Hunting in most Indian States may take place under licence and only in certain well-defined areas usually known as reserved or protected areas. These areas have been divided into blocks(3) (also Nepal(4)) and shooting units. Within such a block a fixed number of animals may be shot yearly under a licence which refers to a block, but rarely to several blocks. Provided that the number of different species within the area is approximately known, this system makes a controlled game harvest possible. It should be pointed out, however, that in many Indian States hunting outside reserved or protected areas is not regulated.

Sporting game licences normally to be found in India fall into one of three types: small game licences, big game licences and special big game licences(5). Schedules to the laws show which animals belong to the various categories of game. These licences and the schedule system are to be found in several Indian States with slight differences. As an exception it may be mentioned that the Punjab Preservation Rules have special licences for various hunting methods, such as hunting with dogs, hawking and netting, and snaring wild animals(6).

1) 34. Sec. 17(8), 36. Sec. 18(8) and 45. Sec. 15(8)

2) 23. Sec. 6(2)(a) and 76.

3) For instance, 35. Sec. 5

4) 66. Sec. 7

5) For instance, 34. Sec. 11, 36. Sec. 11 and 45. Sec. 9

6) 41. Sec. 4

The legislation of West Pakistan contemplates only one type of hunting licence (shooting licence) valid for the whole of West Pakistan, which entitles the holder to shoot listed animals(1). As regards birds, there are restrictions as to the number that may be killed in any one day(2). Possession of a licence to keep firearms is a pre-requisite when obtaining a hunting licence. As in Punjab, the use of hawks or greyhounds for hunting purposes requires a specific licence.

The systems of Australia and New Zealand are slightly different from those described above. The variety of available sporting game licences is less, sometimes there seems to be no licence at all. The exception is the State of Victoria which possesses three kinds of licence(3). One covers the hunting of black swans, opossums or water rats; the second, the hunting of deer, and the third the hunting of wild ducks.

In Burma there are licences for hunting and capturing elephants(4). The annual number of elephants for which licences may be issued in any forest division is fixed by executive order of the Chief Conservator. A portion of the fee for a hunting licence may be refunded if no elephants are killed or wounded. Other licences authorise residents and non-residents to hunt certain numbers of protected animals (other than wild elephants) everywhere except in wildlife sanctuaries, and certain numbers of unprotected animals in reserved forests(5). The total number of animals for which licences may be issued in any individual forest division is fixed by executive order. A licence entitling the holder to hunt certain protected animals is issued only provided the applicant is in possession of a firearm of the prescribed minimum calibre, and has a licence authorising the use of firearms(6). No licence is required to hunt unprotected animals outside reserved forests or wildlife sanctuaries(7).

In Indonesia the situation is somewhat complicated, with the possible hunting licences available numbering five(8). Licence A "entitles the possessor to hunt harmful game with a firearm". Harmful game includes tigers, panthers and crocodiles(9). Apparently the animals mentioned may be hunted without a licence provided no firearm is used. Licence B gives the holder the right to hunt small game and migratory game. Licences C to E entitle the holder, outside the scope resulting from Licences A and B, to shoot a number of big game. Although as was mentioned in the Introduction to this study there is no hunting act applicable outside Java and Madura, the Head of Regional Administration in these outer regions may issue permits to hunt protected animals(10).

In Malaysia big game hunting licences are divided into four classes - A to D(11). The licences authorise the hunting of different number of big game (1 to 4 head) and are issued for specified periods of time (1, 6 or 12 months) and specially designated areas (state or district). Some are granted to persons not normally resident, and some to those

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| (1) 73. Sec. 22 | (7) 26. Sec. 10 |
| (2) 73. Sec. 25 | (8) 32. Sec. 4 |
| (3) 2. Sec. 35, 37 and 41B | (9) 33. Sec. 1 Id. |
| (4) 26. Sec. 3 and 7 | (10) 30. Sec. 3(3) |
| (5) 26. Sec. 10 | (11) 60. Sec. 15 |
| (6) 26. Sec. 14 and 15 | |

resident in the Federation. For a big game licence the game warden may require the applicant to pay a deposit which may, in the event the said person commits any breach of the terms of the licence, be forfeited. Normally, however, such a deposit may be refunded after expiry or other determination of the licence(1). Licences E and F are deer hunting licences with restrictions as to numbers and species which may be shot(2). Licence G is available for game birds(3). Licences H and I finally are available for the hunting of not more than 50 or 100 monitor lizards, respectively(4).

The legislation in force in Cambodia clearly defines the various existing types of licence. A distinction is made between game which is reserved, game which is protected and game which may be hunted. The hunting of reserved game is prohibited during all the year. Protected game may be hunted only according to certain restrictions concerning numbers, sex and maturity, and only by holders of big game or tourist licences. Animals which are neither reserved nor protected may be hunted under the appropriate licence during the open season.

Sporting game licences in Cambodia are divided into four classes. The big game licence entitles the holder to hunt unprotected game as well as a limited number of protected animals but no animals classified as reserved (fully protected animals)(5). A record must be kept of and a fixed royalty paid for every protected animal killed. The licensee may be accompanied by assistants who must not hunt, however, unless they are in possession of the appropriate licences. The medium game licence holder may hunt certain species of deer and bear families which are neither reserved nor protected, and small game (6). The holder of a small game licence may hunt only small game and all birds in flight or on water except reserved or protected species(7). The tourist licence is valid one month and renewable. The holder may hunt a certain fixed number of protected animals(8). Supplementary licences may in exceptional cases be issued to holders of big game and medium game licences in regions where the meat supply is unsatisfactory(9). These licences entitle the holder to hunt unprotected animals only, and expire at the same time as the main licence.

Scientific hunting and capture licences

This type of licence is to be found in most legislation in the region(10). It entitles the holder - normally a bona fide representative of a scientific or zoological organisation or a person with special competence - to kill or catch alive protected animals (in Malaysia totally protected birds) in the interest of science, or to collect specimens for zoological gardens, museums and similar institutions on the conditions prescribed in the licence. Sometimes it is laid down that after expiry of the licence a report has to be submitted indicating all animals which have been taken or destroyed pursuant to the licence.

Commercial capture and trade licences

The commercial capture licence is to be found only in the legislation of Cambodia and Iran(11). Although it seems likely, it is not explicitly stated in the Cambodian Act that this licence also confers upon the holder the right to trade in animals.

(1) 60. Sec. 16

(7) 27. Sec. 18

(2) 60. Sec. 26

(8) 27. Sec. 19

(3) Idem

(9) 27. Sec. 20

(4) 60. Sec. 28

(10) For instance, 5. Sec. 40, 23. Sec. 38 and 34. Sec. 13

(5) 27. Sec. 16

(6) 27. Sec. 17

(11) 27. Sec. 21 and 59. Sec. 14

The licensee is entitled to capture protected or unprotected animals and, in exceptional cases, also reserved animals provided that he has previously obtained a special authorisation from the Minister of Agriculture. The holder must be a person or society recognised by the Minister and in possession of a special licence.

Trade licences are issued usually by officers at the Departmental or Ministerial levels to enable a person (in India, for instance, trophy dealers or dealers in pets(1); in Caylen taxidermists, tanners and curers(2)) to carry on or exercise the business or trade in animals. Such a licence may be subject to conditions, limitations and restrictions. It does not seem that these licences also include the right to capture and hunt animals. An additional hunting licence is probably necessary. In South Australia a trade licence is essential only when trading in protected animals or their carcasses and skins(3).

Conclusions

Hunting licences are necessary in order to prevent excessive hunting. An adequately organised licence system makes a controlled game harvest possible, thereby contributing to a rational utilisation of the wildlife resource.

From the survey above it is apparent that in several countries in the region a vast number of sporting game licences intended for various game exists. In some instances, it would probably be wise to restrict the number of different sporting game licences since a complicated licence system may place a heavy burden, in most cases, on an already weak administrative machinery. Ideally, the types of licence should be established country by country; however, efforts should be made to make the licence system in these countries simple but effective.

In countries where foreign tourists form a substantial part of the hunters, the legislation should provide for a "tourist licence", which should be made available at a higher cost than the corresponding licence issued to citizens of the country concerned.

It is advisable that the enactments which do not provide for firearms licences for hunting purposes do so.

V. EXCEPTIONS FROM THE OBLIGATION TO HOLD GAME LICENCES AND PERMITS

Practically all the legislation studied have provisions which allow - under certain exceptional circumstances - the killing of wild animals without having first obtained a licence or permit. Among the exceptions dealt with below the most common are legitimate defence, destruction of dangerous animals and animals causing damage and the exercise of customary rights. These exceptions are also to be found in the London Convention(4).

Exempted categories of persons

Some of the laws in India(5) and also the law of East Pakistan(6) make exceptions to the obligation to hold a licence in the case of specifically designated state officials,

(1) 34. Sec. 34

(2) 28. Sec. 49

(3) 5. Sec. 58

(4) Art. 8(2) and (5)

(5) 39. Sec. 1, 50. Sec. 8, 51. Sec. 33 and 52. Sec. 13

(6) 71. Sec. 10

state guests, etc. Sometimes this right to hunt without a licence may be exercised only when travelling on duty within the area of jurisdiction of the officer in question. Usually there are also restrictions as to the number of animals that may be hunted. In the State of Andhra Pradesh, for instance, exempted officers may shoot in any notified open block provided that they have first ascertained that the block limit has not already been reached.

Hunting on private lands and enclosed properties

Specific provisions are sometimes made allowing hunting on private lands and enclosed properties without a hunting licence(1) (in South Australia(2) without a gun licence). This right is normally extended not only to the occupier of the land in question but also to members of the household and employees. The legislation of Cambodia further states that the hunting mentioned may take place only on property that is fenced in order to prevent all communication with game and neighbouring properties.

The corresponding regulations in Indonesia seem to refer more to certain hunting methods which are forbidden outside but lawful in buildings or within the boundaries of well enclosed compounds or grounds(3).

Customary rights

Sometimes exceptions to the obligation to hold a game licence are made in favour of the indigenous population. The exempted category of persons is usually clearly defined in the relevant enactments(4). Ceylon has adopted a system with so-called "village areas", the inhabitants of which belong to the exempted category(5). Sometimes the exempted persons are defined as villagers or members of an aboriginal community engaged in hunting armed with spears, blowpipes, etc.(6). From these criteria one may be able to conclude correctly which category is meant. An important aspect is that customary rights may not normally be exercised in a fauna reserve, fauna sanctuary or game reserve(7). The number of animals killed must be reasonable and required for the exempted person himself and his family(8). As to the question of what species of animals may be hunted, the legislation of South Australia admits customary hunting at any time of otherwise protected animals and birds (the close season also need not normally be observed under other laws dealing with customary rights). The legislation of Malaysia allows the exercise of customary hunting rights in respect of deer, game birds, monitor lizards and reserved animals but not big game. In Cambodia only unprotected animals may be hunted. It seems likely that the privilege which customary rights confer upon indigenous people will often be abused. However, no legislation except that of Western Australia explicitly states that if the fauna becomes unduly depleted, measures may be taken to curtail the privileges; only in the Philippines is the exercise of customary hunting rights subject to a special licence(9).

Legitimate defence

The legislation of India and a number of other countries in the region expressly provides that the obligation to hold a hunting licence when killing wild animals does not

(1) 27. Sec. 3(2) and 67. Sec. 19(3)

(6) 27. Sec. 13 and 60. Sec. 52(2)

(2) 5. Sec. 47(2)

(7) 5. Sec. 42, 8. Sec. 23 and 27. Sec.13

(3) 30. Sec. 3 and 32. Sec. 2(2)

(8) 5. Sec. 42, 28. Sec. 12(2)

(4) 5. Sec. 42, 8. Sec. 23, 23. Sec. 78 and
36. Sec. III (1)

(9) 74. Sec. 16

(5) 28. Sec. 12(2)

apply in the defence of human life(1). In some cases, this takes the form of authorising certain normally prohibited hunting methods in the defence of human life(2). The killing in legitimate defence must have been bona fide: it is not considered to be such if it occurred when hunting any game or committing any other action in contravention of the law(3).

In order to diminish the inclination to abuse the right of legitimate defence, a number of laws provide that animals so killed belong to the state(4).

Usually no distinction is made between protected and non-protected animals for the purpose of legitimate defence. However, the legislation of Burma requires that if the animal killed is a protected animal, an immediate report be submitted to the nearest magistrate, forest officer, etc.(5).

Destruction of dangerous animals and animals which cause damage

It should be pointed out that although this exception from holding a hunting licence at first seems to have some points in common with legitimate defence, they represent two different concepts. As has been mentioned, legitimate defence arises in circumstances of immediate danger to a person caused by an attack from a wild animal. If the person attacked does not succeed in killing the animal, it might well be classified as a dangerous animal and belong to the category of exceptions from holding a hunting licence discussed here. Since the danger is no longer imminent, some laws prescribe that a licence or permit must first be obtained to hunt and kill the animal in question(6). This constitutes a qualified exception to the general principle and at the same time differs from legitimate defence in that it constitutes a premeditated act prepared and authorised in advance.

The exception refers to animals causing danger to human life as well as damage to property. As to the latter, cultivated lands and crops and injury to domestic cattle mostly are mentioned. Sometimes if damage or injury is likely to arise, then this is enough justification for the right to be exercised(7). Permission to shoot animals causing danger or damage is normally given to landowners and occupiers (sometimes extended to servants) but also to sportsmen and to employees in the forest service. Some laws explicitly prescribe that the killing must take place in good faith(8). Animals otherwise protected may be killed. The killing of a wild elephant in the State of Madras, India, causing damage on cultivated lands must, however, be preceded by a so-called "prescription" declaring the animal to be a "rogue" elephant(9). Hunting methods prohibited in other circumstances may be allowed against animals causing crop damage or constituting serious menace to human life. Thus in Malaysia, under certain conditions, birdlime may be used against grain-eating birds(10). The Bombay Rules allow the use of artificial light and wheeled vehicles against man-eating tigers or panthers and rogue elephants(11). In the State of Gujarat, hunting with the aid of nets, snares, pits, poison or poisonous weapons may take place in defence of human life and property(12). In the Philippines wild pigs may be taken and

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| (1) For instance 28. Sec. 60(a), 38. Part II VII(c), 55. Sec. 10 and 61. Sec. 5 | (6) For instance 8. Sec. 15(1a)(possums), 23. Sec. 21, 34. Sec. 13, 72. Sec.22 and 67. Sec. 54 |
| (2) 34. Sec. 17(3) | (7) 67. Sec. 54 |
| (3) 34. Sec. 50(2), 40. Sec. 18(1) and 45. Sec. 45 | (8) 43. Sec. 8 |
| (4) 25. Sec. 12 and 34. Sec. 38 | (9) 38. Part III Schedule III D |
| (5) 25. Sec. 12 | (10) 60. Sec. 37(3) |
| | (11) 35. Sec. 4 : 9 |
| | (12) 36. Sec. 18(3) |

killed in any manner whatsoever(1).

Conclusions

There is an obvious risk that the rules laid down in the acts regarding possession of hunting licences as a necessary pre-requisite for lawful hunting may be jeopardized by the exceptions dealt with in this chapter. There are also indications to this end, particularly with regard to the killing of wild animals in legitimate defence and destruction of dangerous animals and animals which cause damage and, to a lesser extent, in the exercise of customary hunting rights. Abuse of these rights is difficult to control. Therefore, the best remedy would be to increase the number of supervisory personnel. This would, for instance, better ensure that carcasses of animals killed in legitimate defence are delivered to the state (it is recommended that such surrender to the state be provided for where it does not exist). It is also believed that dangerous animals and animals which cause damage should preferably be killed by game officers and not by the locals affected, in order to avoid abuse. Finally, it is advisable that a policy of reducing customary hunting rights, in general, be introduced.

VI. HUNTING METHODS

Most of the legislation of the countries included in the study prohibit certain methods in the hunting of wild animals. The main reasons for the prohibitions are that, if allowed, these methods would make indiscriminate hunting possible, thereby causing mass destruction of wildlife. There is a great variety of prohibited methods and these differ from country to country. Generally, however, several of the prohibited methods enumerated below are to be found in all laws in the region. Sometimes these prohibitive provisions contain exceptions mainly to the effect that animals belonging to the family carnivora may be hunted by normally illegal methods. It seems likely that the reason for this is that the antiquated notion that these animals should be looked upon as noxious still prevails in some parts of the region.

It should be mentioned that the 1933 London Convention(2) prohibits the use of motor vehicles or aircraft "for the purpose of hunting, killing or capturing animals, and in such manner as to drive, stampede, or disturb them for any purpose whatsoever, including that of filming or photographing". An exception is, however, made for "occupiers in respect of land occupied by them, or of Governments in respect of land utilised for public purposes", provided this exception does not conflict with any other provision in the Convention. Also the surrounding of animals by fires for hunting purposes; the use of poison or explosives for killing fish; the use of dazzling lights, flares, poison, or poisoned weapons for hunting animals; the use of nets, pits or enclosures, gins, traps or snares, or of set-guns and missiles containing explosives for hunting purposes are prohibited.

Regarding hunting methods which are prohibited in various countries, see Table 2, pages 45-47, Annex II.

Prohibited hunting methods

(a) The use of motor vehicles, aircraft, etc.

Most of the legislation examined prohibits the hunting from or by means of a wheeled or a mechanically propelled vehicle on water or land or by aircraft. In accordance

(1) 74. Sec. 14

(2) Sec. 10

with the 1933 London Convention, some laws in India(1) prohibit driving or stampeding game, while Burma(2) even prohibits the disturbance of game, including filming and photographing. In that country, hunting from the back of an elephant and in Pakistan hunting from a railway carriage are considered in the same light(3). Other laws provide that no person shall approach any game in a motor vehicle and shoot it from the vehicle or within a certain distance from the vehicle(4). However, hunting from boats is allowed in New Zealand provided that the vessel is moored(5). Hunting ducks with the use of an outboard motor is allowed in the State of Maharashtra, India(6), while in the Philippines such hunting is allowed only from "a boat or floating device" not in motion(7). Hunting from a boat or other navigable vessel is allowed in the State of South Australia provided that the speed of the boat does not exceed five miles per hour(8). In some cases, hunting from motor vehicles is prohibited only at night(9).

The use of motor vehicles is expressly authorised for the hunting of carnivores in Burma(10) or in some states in India(11), in the case of the "man-eating tiger or panther or a rogue elephant, which is a source of serious menace to human life and property."

(b) The use of explosives, traps, nets, set-guns, etc.

Several of the prohibitions against hunting with explosives have a bearing upon fishing; for instance, in the Northern Territory, Australia, where exploding an explosive substance or detonator on or under the surface of any water is prohibited(12). However, the use of explosives may also be illegally used when hunting other animals. That is why legal measures have been taken in the States of Maharashtra, Himachal Pradesh and Madras, India, in order to prevent this hunting method(13). Since it is felt that the use of nets is too effective a method of hunting birds, it is prohibited in a number of laws. But in the Philippines - although similarly legislated against - this hunting method, together with artificial light, seems to be very commonly used.

Other hunting methods usually prohibited are the use of potholes, snares, enclosures, traps and spring guns. In Malaysia these methods are prohibited first of all in the interest of man, so as not "to endanger human life or to cause grievous bodily harm to any person(14)." In Himachal Pradesh, India, the netting, noosing and snaring of *Macacus Rhesus* for the purpose of export is prohibited(15). The mere possession of any weapon, explosive, trap or net in a national reserve is considered an offence in Singapore(16). Malaysia allows the destruction of tigers, panthers and leopards by the aid of spring guns or other contrivances, provided that permission has first been granted(17). In West Pakistan also these hunting methods normally prohibited may be used

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| (1) 36. Sec. 18(2) and 45. Sec. 15(2) | (9) 50. Sec.2, 52. Sec. 9, and 56. Sec.22(2) |
| (2) 25. Sec. 10(f) | (10) 25. Sec. 10(e) |
| (3) 25. Sec. 10(e) and 71. Sec- 14(a) | (11) 35. Sec. 4 : 9 |
| (4) 37. Sec. 4(b), 400 yards, 47. Sec. 2, 50 yards and 56. Sec.22(2), 100 yards | (12) 19. Sec. 39(a) |
| (5) 67. Sec. 18(f) | (13) 35. Sec.6(2), 37. Sec.4(b) and 38. III 2g |
| (6) 34. Sec. 17(10) | (14) 60. Sec. 36(1) |
| (7) 74. Sec. 13 | (15) 37. Sec. 43 |
| (8) 5. Sec. 54 | (16) 76. Sec. 9 |
| | (17) 60. Sec. 36(1)(a) |

in exceptional cases(1).

(c) The use of dogs

The legislation of the countries studied sometimes contains provisions restricting the use of dogs when hunting. In some countries the use of dogs for whatever hunting purposes may be strictly prohibited(2), while in others, it may be allowed for certain unprotected animals(3), or carnivores(4). In the State of Himachal Pradesh, the use of dogs for flushing and retrieving small game such as birds and hares or in Madhya Pradesh wounded big game, is allowed provided that the hunter possesses a dog licence.

(d) The use of firearms and ammunition

There is a great variety of regulations in the region of this subject. Existing provisions mainly distinguish between the use of too effective firearms and ammunition and inadequate firearms and ammunition. Among the former are considered machine guns(5), swivel guns(6), punt guns(7), any rifle(8) and guns having barrels in excess of a certain length, bore or weight(9). Also any device used for the purpose of silencing the report of a firearm is illegal in New Zealand(10). Firearms used for hunting mainly big game which do not have a prescribed minimum calibre and which consequently are not capable of firing bullets of sufficient size or weight are prohibited(11). As for ammunition there are sometimes provisions on minimum muzzle velocity also(12).

(e) Hunting by using dazzling lights, flares, etc.

Hunting with the aid of artificial light such as lamps, flares, dazzling lights, etc., is usually prohibited in the region regardless of whether the legislation contains prohibitions on hunting at night or not. A very common exception is, however, that carnivores or certain species thereof may be hunted by using artificial light(13), though sometimes only if they are serious threat to human life or property. The relevant legislation of Rajasthan explicitly prohibits hunting of carnivores "without suitable lighting arrangements"(14). In Madras the category of animals that may be shot by aid of artificial light are birds of prey, wild pigs, wild dogs, porcupines and wolves(15). In the Philippines and in Cambodia the mere possession of a lantern for hunting at night is prima facie evidence that the possessor has the intention of using it for unlawful hunting(16). In the State of Madras even photography of game using flash light is prohibited.

(f) The use of poison and poisoned weapons

Most of the legislation contains prohibitions on the use of poison for hunting purposes, particularly when fishing. Normally the putting in any waters, rivers and streams of poisons or noxious substances with the intent to kill, injure or take any fish is prohibited. However, there is also quite often a general prohibition on the use of

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| (1) 72. Sec. 5 | (7) 2. Sec. 12-13 and 67. Sec. 18(c) |
| (2) 49. Sec. 2(4) and 50. Sec. 1(b) | (8) 67. Sec. 18(c) |
| (3) 5. Sec. 53, 37. Sec.4(b) and 73. Sec.15 | (9) 23. Sec. 36(I)(ii) and definitions |
| (4) 25. Sec. 10(i) | (10) 67. Sec. 18(d) |
| (5) 33. Sec. 6 and 59. Sec. 19 (note, however that no military firearms shall be deemed to be prohibited guns in Queensland) | (11) For instance, 35. Sec. 6, 37. Sec.4b and 59. Sec.19 and 60. Sec. 17 |
| (6) 2. Sec.12-13, 67. Sec. 18(c) and 74. Sec.13 | (12) 26. Sec. 14 |
| | (13) 35. Sec. 4 : 9 and 60. Sec.40 |
| | (14) 49. Sec. 2(3)(a) |
| | (15) 38. III 2 h and 39. Sec. 7 |
| | (16) 27. Sec. 7 and 74. Sec. 13 |

poison and poisoned weapons, which consequently also covers animals not living in water. Subject to certain conditions, some laws provide that the adequate official may authorise the use of poisons, as for example in Rajasthan where the poisoning of carcasses of animals killed by man-eating carnivores or by wild dogs may be allowed(1). In Malaysia the use of poison for the purpose of destroying agricultural pests may be granted in a written permit by the game warden(2). In the Northern Territory, the use of poisonous substances or baits is allowed only if certain conditions have been complied with, such as the poisoned area being securely fenced and displaying of a notice on the land as well as in a local newspaper(3). The use of the poisons potassium cyanide or any of the compounds of cyanogen is considered as an aggravating circumstance in the States of Victoria and Queensland(4).

(g) Hunting by using fire

Prohibitions on setting fire to any vegetation for the purpose of hunting are to be found mainly in the Indian legislation(5). However, Cambodia and Indonesia have incorporated provisions of the same tenor in their legislation(6).

(h) Hunting at night

Very little of the legislation contains provisions prohibiting hunting at night. These are mainly to be found in the Indian legislation. The definitions as to what should be considered as night differ. Thus, in some cases hunting may be prohibited after sunset and before sunrise, or one hour after sunset and one hour before sunrise; or "during the hours of darkness", or "at night"(7). There is, however, more or less a general exception in favour of hunting carnivores at night on condition that the animal is "sitting on a kill"(8). In Rajasthan carnivores may be hunted at night without any limitations at all, provided that suitable lighting arrangements are available(9). Some laws also permit hunting water birds at night(10).

(i) Other prohibited hunting methods

Mention will be made under this heading of some more prohibited hunting methods on which provisions are seldom found. The use of birdlime or other viscous substances when catching birds seem to have had an unfavourable effect on the bird populations in Queensland, Malaysia, Ceylon and Hongkong, where these methods are now strictly forbidden(11). The practice of hunting birds by using call birds or decoys is forbidden in Pakistan, is subject to a licence in Malaysia (only decoys), is prohibited in New Zealand (any live decoy) and in the State of Punjab (call birds of any kind except quails)(12). Hawking wild birds

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| (1) 49. Sec. 2(2) | (7) For instance, 28. Sec.53(a), 34. Sec. 17(6), 60. Sec. 40 and 52. Sec. 9 |
| (2) 60. Sec. 36(c) | (8) 34. Sec. 17(6), 36. Sec.18(6), 45. Sec. 15(6) and 81. Sec. 12 |
| (3) 19. Sec. 50(3) (4) | (9) 49. Sec. 2(3) (a) |
| (4) 2. Sec. 11(2) and 23. Sec. 34(1) | (10) 41. Sec. 9(a) and 73. Sec. 24 |
| (5) For instance, 34. Sec. 17(4) and 36. Sec. 18(4) | (11) 23. Sec. 35, 28. Sec. 30, 29. Sec. 4 and 60. Sec. 37(2) |
| (6) 27. Sec. 34 4 and 33. Sec. 6(1) | (12) 72. Sec. 8, 60. Sec. 37(1), 67. Sec. 18(f) and 40. Sec. 9a |

and wild animals without a licence is sometimes recognised as an illegal hunting method(1). The use of a "bhagwa" which is "a saffron-coloured sheet of cloth used for enticing and alluring wild birds and wild animals" in killing, shooting and capturing any wild bird or wild animal, is likewise forbidden in Punjab(2). In New Zealand the spreading of oil on any water is prohibited as a hunting method(3). The Nepalese legislation prohibits hunting by means of blowing any instrument or by making sounds by means of leaves(4).

Many laws, mainly in India, contain prohibitions on hunting near water-holes or salt licks or on paths leading into such places. To lie in wait for game in an ambush or hide on a platform in a tree (machan) with the intention of killing game is also considered illegal(5).

Conclusions

It is evident from the above catalogue that there is a great variety of prohibited hunting methods. It should be noted that in legislation using the enumerative method attention must be paid continuously to "new hunting methods" which should be considered as unlawful so that adequate legal measures can be taken at an early stage. It should, however, also be pointed out that the enumerative method has the disadvantage of giving information about a number of undesirable hunting methods which may consequently be used in a society where law enforcement is inadequate. It may, therefore, occasionally be better to have a general provision prohibiting generally too efficient, cruel, etc. hunting methods.

VII. PROTECTED SPECIES

The 1933 London Convention lays down(6) that animals belonging to Class A in the Annex of the Convention "shall in each of the territories of the Contracting Governments be protected as completely as possible and the hunting, killing or capturing of them shall only take place by special permission of the highest authority in the territory" and "solely in order to further important scientific purposes or when essential for the administration of the territory". Also animals belonging to Class B "whilst not requiring such rigorous protection as those mentioned in Class A, shall not be hunted, killed or captured except under a special licence. For this purpose a special licence shall denote a licence other than an ordinary game licence". Such a licence shall be limited as regards the period and the area within which hunting, killing or capturing may take place.

The method used to protect rare animals in the legislation examined partially resembles the one used by the London Convention. Normally animals which are fully protected and thus may under no conditions be hunted are listed in schedules to the laws. (However, some Australian legislation goes the opposite way as it defines protected animals as all animals which are not listed as unprotected(7)). There seems to be no provisions in the legislation examined corresponding to the possibility of giving a special permission to hunt protected animals "when essential for the administration of the territory" or to that

(1) 37. Sec. 28, 40. Sec. 9(b) and 72. Sec. 6

(2) 41. Sec. 9 h

(3) 67. Sec. 18 g

(4) 66. Sec. 8(c)

(5) 28. Sec. 53 c, 25. Sec. 10(c), 52. Sec. 9
and 60. Sec. 38

(6) Sec. 8

(7) 5. Sec. 35, 8. Sec. 14(1) and 19.
Sec. 30

provision of the Convention regarding animals belonging to Class B. However, not only are protected animals listed in schedules attached to the legislation. This is also generally the case regarding game animals. Sometimes game animals are divided into various categories such as small game, medium-sized game and big game. It is true to say that also animals listed as game animals are, to a certain extent, protected since they may not be hunted except under a sporting game licence which may contain restrictions as to the number of animals which may be killed, the area where the hunting may take place and the open season. On the other hand, the animals listed as pests or vermin are totally unprotected.

The possibility of amending the schedules is sometimes expressly provided for. In the States of Victoria and Queensland, Australia, such amendments are made by the Governor in Council(1); in some Indian states by the State Government(2) and in New Zealand by the Governor-General(3). The correct updating of the schedules sometimes presents a problem, which will be illustrated by means of examples.

For instance, the Bombay Act classifies cranes and bustards among the category of small game and the black buck and four-horned antelope among the category of big game, although these animals - according to wildlife experts - should at present be fully protected. Monkeys and birds of prey appear without any clear specification in the schedule of vermin, which, in fact, means that they are totally unprotected and may be hunted even without a licence. It seems likely that similarly incorrect schedules will be found in several laws from India.

In Indonesia the schedule listing protected animals contains seven species, among them the dwarf buffalo (anea), though this rare animal may occasionally be hunted under a permit outside Java and Madura. Moreover, it would seem as if at present all species - except these seven protected - may be hunted without any restriction at all in the outer regions of Indonesia. Conceivably, additional decrees or orders supplementing the schedule which were not available at the time of this study may have been issued since.

In Malaysia gaur and banteng are listed as big game although they are rare and should be listed in the schedule of totally protected animals. Similarly, a deer hunting licence may be issued to hunt serows, which are also considered as rare animals. Finally, the schedule referring to game birds contains some rare birds such as the argus pheasant, mountain argus, peacock pheasant, fireback pheasant, etc.

Conclusions

Although at first sight the schedule system seems to be practical, it is sometimes difficult to keep it up to date; that is, to add to the schedules animals which have become rare and delete animals which are more abundant. This approach demands a systematic follow-up so that the lists containing protected animals (and game animals) are effectively changed according to the actual situation. This has not always been done, as shown above. The reason may either be due to ignorance about the species which need to be protected or to administrative difficulties in amending the schedules. If this is so, the system adopted by some laws in Australia, declaring all animals to be protected except those specifically designated as being unprotected, probably offers a more effective method of securing protection for the endangered fauna.

(1) 8. Sec. 4 and 23. Sec. 14

(2) 34. Sec. 53A, 36. Sec. 50 and 45. Sec. 49

(3) 67. Sec. 8

VIII. PROTECTED AREAS

The 1933 London Convention provides for five types of protected areas(1). National parks are areas placed under public control and set aside for the protection and preservation of fauna and flora and for the preservation of objects of aesthetic, geological, prehistoric, historical, archaeological or other scientific interests for the benefit, advantage and enjoyment of the general public. Strict natural reserves are areas where all activities causing disturbance to the fauna and flora (including entering, traversing, and camping) are forbidden except under a special permit. Intermediate zones, which seem to serve the purpose of buffer zones, may be established around the borders of national parks and strict natural reserves. Within such a zone, hunting, killing and capturing of animals is controlled. No property owner in such an area shall have any claim in respect of depredation caused by animals. Reserves may be set aside "as measures preliminary and supplementary to the establishment of national parks and strict natural reserves". Within a reserve the fauna - except fish - is fully protected. As far as may be practicable a similar protection should be given to the natural flora. Special reserves are areas which should be established "for the preservation of species of fauna and flora which it is desired to preserve, but which are not otherwise adequately protected".

From the enumeration and description of existing areas below, it will be seen that there is a great variety of protected areas in the region which makes any comparison between them and the 1933 London Convention rather difficult. This is particularly true regarding wildlife preservation areas. There is without any doubt a need at present for some sort of uniform standards as to the scope and purpose to be attributed to the various protected areas and what restrictions should apply to them.

Nature of land included in protected areas, expropriation, boundaries, etc.

As a preliminary stage in establishing protected areas, the nature of the land to be comprised in such an area must be examined. The question arises whether only public or private land, or both, are to be included, and if easements or other rights should be allowed to exist within protected areas. Furthermore, it has to be decided if private land is to be purchased or - failing such purchase - expropriated. The trend appears to be that these questions are solved somewhat differently for national parks, on the one hand, and for wildlife preservation areas, on the other.

(a) National parks

The majority of national parks' acts establish more or less clearly the principle that land on which a national park is to be established may not be owned or legally possessed by any person other than a public body(2). The only exception from this generally accepted rule appears in Indian enactments(3) which state that rights within a national park which have been admitted and recorded by a forest settlement officer or have been granted before the coming into force of the act shall not be altered or interfered with, except with the consent of the person enjoying the right thereby affected. This provision very probably facilitates the various forms of habitat destruction which are said to be found in many Indian national parks.

(1) Sec. 2, 4 and 7

(2) 1. Sec. 16, 3. Sec. 8, 31. Sec. 2, 63. Sec. 10, 68, Sec. 1 and 83, Sec. 6

(3) 44. Sec. 7 and 57. Sec. 3(4)

Where private land is to be included in a national park, many laws state explicitly that such lands may be purchased. Whether compulsory purchase is also meant is uncertain. Also any easement, right or privilege may be acquired when necessary to provide access to any national park(1). Provisions are sometimes found, giving the appropriate body the right to enter private lands and, when it becomes necessary, even break down fences for the purpose of making inspections, investigations and enquiries in order to make decisions on what lands may be recommended as a national park(2).

The State of Sabah has adopted a procedure worthy of imitation when acquiring land for the purpose of declaring it as a national park(3). The initial stage of the procedure is that the Governor in Council by notification in the Gazette declares his intention to constitute a national park in a certain area. Any person who has any objection to the proposal or who claims to exercise any right or privilege, has to announce this within a specified short period. In the meantime, the proposed area is protected against all forms of alienation, including the building of houses, establishment of plantations or of clearings for cultivation. The Governor finally concedes, modifies or disallows the exercise of rights and privileges and admits or rejects objections wholly or in part. If necessary, privately-owned land may be acquired as for a public purpose and included in the national park. Except for the Scenery Preservation Act, Tasmania, and the National Parks Act, New Zealand, which also admit the "taking of private land(4), the possibility of expropriating any land for the purpose of incorporating such a land into a national park does not seem explicitly to be provided for.

(b) Wildlife preservation areas

Much of the legislation in the region provides that areas set aside may comprise public as well as private land. When private land becomes part of a suggested preservation area, it is often provided that the consent of landowners or occupiers must first be obtained. The right of expropriation of private land necessary to form a preservation area is not explicitly provided for. Indirectly one can assume, however, that expropriation is recognised at least in New Zealand, since compensation may be paid if private land is included in a wildlife sanctuary without the owner's consent(5). The disadvantage for the correct management of a sanctuary in which private land is incorporated is clearly seen in the legislation of South Australia where the owner of any land belonging to a fauna sanctuary or game reserve may simply request that the land shall cease to have this status(6). The Northern Territory, Philippines, Thailand and the State of Jammu and Kashmir seem to possess the only laws which explicitly state that a land to be determined as sanctuary, game refuge, wild animal preserved area and reserve, respectively, must consist of unoccupied state land and that it must not be owned or legally possessed by any person other than a public body(7).

(1) 3. Sec. 8A and 63. Sec. 13

(2) 17. Sec. 18 and 20. Sec. 18

(3) 64. Part II

(4) 13. Sec. 7(2) and 68. Sec. 13

(5) 67. Sec. 9(5)

(6) 5. Sec. 27

(7) 19. Sec. 14(2), 74. Sec. 5, 81. Sec. 19 and 42. Sec. 5

(c) Boundaries

An equally important question - once a protected area has been set aside - is that the boundaries of the areas shall be defined and marked out on the terrain in such a way that there is no doubt which area is actually preserved. It became obvious during the preparation of this study that this is not always the case. Some of the enactments, however, specifically state that notices, posts or signs should be erected at suitable places or on the boundaries of the protected areas(1). A knowledge of where the area is located is a necessary pre-requisite for the observance by the public of restrictions imposed on protected areas.

Protected areas, definitions, public access, exceptions from restrictions

I. National parks

(a) Definitions

The various national park acts have definitions of national parks which do not differ substantially. (It should be mentioned that some laws state that also places of historical interest - in conformity with the London Convention - may be set apart as national parks(2)). The definition laid down in the New Zealand Act appears to correspond closely to the generally recognised concept and objectives of setting aside national parks(3). Thus, an area in that country is declared and set aside as a national park in perpetuity for the benefit and enjoyment of the public. It contains scenery of such distinctive quality or national features so beautiful that preservation is in the national interest.

Generally, national parks, according to the laws available, are to be preserved as far as possible in their natural state and all efforts should be made to maintain the existing environment. This includes complete protection of fauna and flora as well as provisions against introduction of alien species and trespass by livestock, which makes national parks in this respect very much like some fauna and flora preservation areas. The Philippines Act also declares national parks as game refuges and bird sanctuaries(4). The majority of laws prohibit the exploitation of minerals, soil, gravel, sand, etc., within national parks.

(b) Public access

In spite of the fact that national parks are normally set aside for the benefit and enjoyment of the public, complete freedom of entry and access into national parks is not normally recognised.

Although the Australian laws have no restrictions on this matter, they do not allow camping or the use of caravans, except at places set apart for the purpose and subject to the issue of a permit(5). Restrictions may also be imposed regarding the hours

(1) 5. Sec. 28, 8. Sec. 12 c and 28, 19. Sec. 16 and 24, 23. Sec. 31 and 81. Sec. 21

(2) 3. Sec. 4 b, 13. Sec. 6, 63. Sec. 3(i) and 76. Sec.1

(3) 68. Sec. 3(1)

(4) 76. Sec. 2

(5) 4. Sec. 11 and 10. Sec. 35 and 36(2)

during which and the days on which national parks shall be open to the public(1). In Indonesia the Governor may, for reasons which are not, however, specified in the Act, close a national park; in an emergency this may be done by the "local intendent"(2).

The Madhya Pradesh, Uttar Pradesh and Ceylon laws do not allow public access otherwise than through manned entry gates. It is necessary first to obtain a permit, which is issued only for the purpose of studying or observing the fauna and flora.

It may be mentioned as a matter of interest that the National Parks Regulations of Victoria and the National Parks Board by-laws of Western Australia may stress upon behaviour in national parks(3). It is thus not allowed "to be clothed in an indecent manner, to use any profane, indecent or obscene language, to use any threatening, abusive or insulting words, or behaves in a riotous, indecent, offensive, threatening or insulting manner within a national park."

(c) Exceptions from restrictions

There are a number of important exceptions from the prohibitions regarding various activities within a national park area. The majority of laws thus have provisions which allow the prospecting for and utilisation of nature resources such as coal, mineral and petroleum deposits and water power when these are occasionally located within a national park. In the case of New Zealand, it is explicitly stated that nothing in the Act shall in any way restrict the operation of the Mining Act(4). Likewise, the same Act provides that any national park or any specified part thereof may be declared to be subject to the Coal Mines Act(5). Similar provisions have also been incorporated into several acts from Australia and the Taman Negara Act. The Tasmania Act lays down that mining operations may take place only upon the condition "that the advantage of making the relevant land available for mining purposes materially outweigh the disadvantages thereof"(6).

The situation is less clear in the case of certain laws which provide for the granting of licences to occupy or use lands within a national park, without mentioning anything about the pre-requisites necessary for such a grant(7). Likewise, a vague provision in the Act of Uttar Pradesh allows a person to enter for the purpose of "trans- action of any lawful business(8)".

To facilitate tourism within national parks, leases of land may be granted for the purpose of building hotels and providing other facilities and amenities(9). This also means that rights of way or other easements upon or in national parks have to be granted for the purpose of providing access to areas included in any lease or licence within the park(10). The Taman Negara Act permits the leasing use or occupation for the purposes of construction and maintenance of roads, railways, airports and dams within a park(11). Finally, the Indonesia Act provides that the collecting of forest products and plants and the tending of cattle may take place within a national park if the person engaging in such activities holds a written permit issued by the local intendent(12).

(1) 7. Sec. 17(d)

(8) 44. Sec. 8(2)(c)

(2) 31. Sec. 4(2) and (3)

(9) 1. Sec. 30(1)(a), 7. Sec. 15(1)(c)
17. Sec. 16(2)(h)(i), 63. Sec. 5(i)(e)
and 68. Sec. 28 (f)

(3) 4. Sec. 4 and 10. Sec. 19

(10) 1. Sec. 31 and 68. Sec. 32

(4) 68. Sec. 59(1)

(11) 63. Sec. 5(i)

(5) 68. Sec. (2)

(12) 31. Sec. 8

(6) 13. Sec. 10(4)

(7) 1. Sec. 30(1)(c), 3. Sec. 9(4)a and
13. Sec. 17(1)

II. Wildlife preservation areas

While definitions and restrictions regarding national parks do not essentially differ, the types of areas set aside for the purpose of wildlife preservation are varied, thus precluding any generalisation in this respect. Accordingly, there is no choice here but to describe most of them.

Among the Australian States, South Australia has the greatest variety of more or less protected wildlife areas(1). A prohibited area is set aside for the permanent conservation of animals and birds. Public access is prohibited. A fauna reserve is defined as an area where it is expedient to reserve the land for the permanent conservation of animals and birds. However, it is not necessary to prevent public access. A fauna sanctuary is an area to be used for purposes other than the conservation of animals, but it is desirable to conserve the animals therein as far as practicable, having regard to the other uses of the land. A game reserve is an area set aside for the permanent conservation of animals under the condition that the land is managed as a game reserve and is not likely to be used for any purpose inconsistent with the propagation of animals. The fauna in the above-mentioned areas is thus protected. This protection would seem to include habitat preservation except in the case of fauna sanctuaries.

In Queensland(2) the only existing type of protected area is the sanctuary. A national park declared as such is automatically also a sanctuary under the Fauna Conservation Act. The only restriction on activities within a sanctuary is that hunting is prohibited.

The Northern Territory has two different types of preservation areas: sanctuaries and protected areas(3). Sanctuaries resemble the prohibited areas of South Australia. Accordingly, public entry is forbidden and it may be assumed that habitat preservation is also included. Within a protected area nobody except exempt persons, inspectors and officers may have in their possession a firearm or trap.

In Victoria sanctuaries do not provide a continuous protection for the fauna nor, probably, for the habitat also, since hunting and killing of native game and trespassing are forbidden only during fixed periods in each year(4).

In the Territory of Papua and New Guinea "an area may be declared a Protected Area in relation only to a species of fauna or class of fauna" which shall not be taken or killed(5). Hunting may occasionally occur in a sanctuary since the administration may specify fauna or classes of fauna that may lawfully be taken or killed(6).

In New Zealand there are wildlife sanctuaries and wildlife refuges(7). As there are no clear definitions in the Act, one can separate them only indirectly by examining

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- (1) 5. Sec. 22-25
 - (2) 23. Sec. 26-32
 - (3) 19. Sec. 14 and 22
 - (4) 2. Sec. 5
 - (5) 15. Sec. 20-21
 - (6) 15. Sec. 17-19
 - (7) 67. Sec. 9-13 and 14

what conditions may be imposed with respect to each category. As for sanctuaries, the conditions which may be imposed are, inter alia, restrictions of entry, hunting and killing of wild animals, burning and clearing, camping, use of firearms, cattle grazing, cutting, construction and maintenance of private roads. As to wildlife refuges, authorisation may be given to an occupier of land included in the wildlife refuge to bring domestic animals on the land and to perform any act necessary for the carrying on of the normal use of the land. Hunting and killing of any wildlife is unlawful. It is thus obvious that sanctuaries offer a far better fauna protection as they may also provide habitat preservation. The wildlife refuges, on the contrary, admit habitat destruction.

A number of laws from India have quite identical criteria as to what should be meant by a game sanctuary(1). Normally no hunting is allowed. In exceptional cases, however, hunting may take place if it is deemed necessary "for the better preservation of animal life or for other good and sufficient reasons". To enter and reside within a game sanctuary is prohibited except under a permit (investigation or study of wildlife, other scientific research, photography, transaction of lawful business with any person residing in the sanctuary). Free access to a game sanctuary is, however, granted to any public servant on duty, any person who ordinarily resides or has any rights over immovable property within the limits of a sanctuary, any person passing through a sanctuary along a public highway, and the dependents and servants of the above-mentioned persons(2). From the last exceptions which necessarily constitute a serious threat to the correct management of the sanctuaries, one can understand that settlements may be found within the boundaries of a game sanctuary, as well as private lands which are not definitely incorporated into the sanctuary. In many of these sanctuaries, not only isolated settlements but villages exist within the boundaries. These villages were already there when the area was set aside and, accordingly, it is now very difficult to remove the inhabitants, although efforts in this direction are being made. It should particularly be emphasised that among Indian laws available none seems to aim at preservation of the habitat within sanctuaries except the legislation of Jammu and Kashmir, which knows of three types of protected areas, all of which, to a certain extent, offer habitat preservation(3). From the Act of Jammu and Kashmir, it is hard to determine the difference between game sanctuaries and game reserves. Both are areas set aside for the preservation of game. Extraction of forest produce and traffic may take place in both if "not detrimental to the preservation of game". Shooting, grazing, cultivation or habitation are normally prohibited. In a reserved area, the grazing and cutting of trees, bushes and undergrowth are not normally allowed. The remaining legislation from India and similarly from Pakistan provides for a type of wildlife preservation area usually called sanctuary or wildlife sanctuary wherein prohibited acts are limited to hunting and killing of wild animals.

Thailand legislation affords fauna protection to sanctuaries as well as habitat preservation, including prohibitions against cutting, felling, clearing, burning or destroying trees or other vegetation(4).

Ceylon has a somewhat complicated fauna protection system consisting of nature reserves, jungle corridors, intermediate zones and strict nature reserves, the difference between which is not clear(5). In all areas, however, hunting and shooting as well as

(1) For instance, 34. Sec. 19-32

(2) 34. Sec. 28

(3) 42. Sec. 6 and 7

(4) 81. Sec. 22-24

(5) 28. Sec. Part I

habitat destruction is unlawful. Public entry is normally not allowed.

The legislation of Malaysia provides for two types of preservation areas, sanctuaries and game reserves (1). In the former, hunting and killing is forbidden while in the latter permission may be given to hunt. No provision deals with habitat preservation in these areas.

The Act for protection of game and fish in the Philippines distinguishes between game refuges and bird sanctuaries(2). In addition, also botanical gardens, public parks, public school sites, public playgrounds, government experiment and breeding stations, cemeteries, and all public lands and forests within a radius of one kilometre from any government rest house, are automatically in their respective capacity declared game refuges and bird sanctuaries. The hunting and killing of wild animals is unlawful in these areas, whereas the habitat does not seem to be protected.

In an integrated nature reserve in Cambodia, nature protection is of a permanent and complete character. Public access is normally prohibited. Fauna reserves have been created to safeguard and facilitate the reproduction of all or certain species of fauna. Hunting, capturing or destroying the game within such a reserve is forbidden. People living in these reserves have to restrict their daily activities so as not to cause unnecessary disturbance to the fauna. Temporary reserves are areas where hunting is prohibited during a certain period, or areas where hunting may take place only under a permit(3).

Conclusions

It emerges from this chapter that it is difficult to have a clear picture of the objectives of the region's protected areas as laid down in the respective definitions. The latter tend to be vague and sometimes do not make a clear distinction between various forms of protected areas provided for by one and the same enactment. In some countries it is doubtful whether the present large number of various kinds of protected areas is needed; in others, existing types of protected areas may not be sufficient. The need for, and objectives of, protected areas have to be established by biologists separately for each country(4). Once the objectives of the various types of protected areas needed have been formulated, definitions can readily be laid down in national legislation.

Furthermore, it is unfortunate that habitat preservation has not always been incorporated as an integral part of the definition of protected areas. Habitat destruction is a phenomenon of major concern throughout the region and wildlife authorities are generally in agreement that any efforts to save the fauna without preserving its habitat are bound to be unsuccessful. In national park acts, habitat destruction is prohibited or may be allowed only in exceptional cases, as has been shown above. The fact that habitat destruction still goes on in national parks is therefore almost entirely a question of law enforcement. The laws on wildlife preservation areas, however, while affording more or less complete protection to the fauna within the areas in question, contain, or are backed up by, remarkably little legislation designed to preserve the habitat of the protected fauna. Human settlements, cattle grazing and forest exploitation are common within these areas.

(1) 60. Part III

(2) 79, Sec. 5

(3) 27. Sec. 25 and 26

(4) An example of definitions of protected areas created for various purposes is found under the Chapter "Guidelines in establishing national legislation, etc." of this study

Little has been done in the region through legal measures to prohibit habitat destruction. However, the legislation of Burma states that grazing may not occur within three miles of the boundaries of two specific sanctuaries. The provision seems to have a bearing, however, mainly upon the prevention of diseases being spread to wild animals from domestic live-stock(1). In Ceylon domestic animals found in a reserve may be seized and released to the owner on the payment of a prescribed fine.(2). In the Northern Territory of Australia, if "feral animals", defined as animals of domesticated species which are living in a wild state, are present in a sanctuary in such numbers that the habitat is affected, these animals may be destroyed(3).

IX. TRADE IN WILD ANIMALS AND THEIR PRODUCTS

Many laws contain provisions prohibiting exportation and importation of wild animals except under the prescribed licence. In spite of this, however, and according to trade statistics available, the trade in wild animals and their products in certain parts of the region continues on such a scale as to cause a serious threat to the fauna. Since Singapore and Hongkong are main trade centres in wild animals and wildlife products, it should be worthwhile examining their legislation on such trade. The legislation of the countries involved as exporters to Singapore and Hongkong, mainly Indonesia, Malaysia, Thailand, Philippines and the Territory of Papua, Australia, is also of interest and will, therefore, be passed in review.

The 1933 London Convention contains detailed provisions on the subject of trade in wildlife and their products(4). "Each Contracting Government shall take the necessary measures to control and regulate in each of its territories the internal and the import and export traffic in, and the manufacture of, articles from trophies". An export certificate may be granted only if the trophies are lawfully imported or lawfully obtained. Lawful import may take place only on production of a certificate of lawful export. Trophies for export may be identified for marks which, together with the weight, must be recorded in the certificate of lawful export. Furthermore, such measures must be taken "as may be possible by the preparation and circulation of appropriate illustrations or otherwise to instruct customs officers in the methods of identifying the species mentioned in the Annex to the Convention and the trophies derived therefrom."

However, few laws, if any, have regulated the trade in wild animals in such a detailed way as the 1933 London Convention.

In Singapore large numbers of live animals and birds for purposes other than food are being re-exported along with fish for aquaria, crocodile, lizard and snake skins. An examination of the two laws which regulate the trade with animals reveals that it is in the hands of the Minister for Law and National Development to specify the countries, or the parts of any country, from which animals and birds or any specific kinds of animals or birds may be imported or trans-shipped either with or without restrictions(5). A licence issued by the Director of Primary Production is necessary to import, trans-ship or export any

(1) 26. Sec. 29

(2) 28. Sec. 6(3)

(3) 19. Sec. 53A

(4) Sec. 9

(5) 78. Sec. 6(1)(a)

animal or bird(1). An exceptional provision, however, gives the Director the right to permit the importation into Singapore of any animal or bird, the carcass, or any product thereof, from any country or place subject to such conditions as he may see fit to impose(2). Finally, the master of any ship, aircraft or train, on board of which there is any animal or bird, whether such animal or bird is intended to be landed in Singapore or not, is instructed to report the fact to a port officer(3).

It seems as if the legal instrument to prevent or reduce a non-desirable trade in animals is already there. But it is questionable whether the legal means have been utilised in such a way as to provide satisfactory protection for the fauna. It must first be emphasised that the Minister has, indeed, made use of his powers to make orders restricting the import or trans-shipment of animals, but so far these orders have had a bearing upon domestic animals(4). Besides, nothing is known about whether the exceptional provision above is habitually used by the Director of Primary Production or not or whether the report mentioned is usually submitted or not. The necessary licence to trans-ship or export animals from Singapore is, in all probability, liberally given. Finally, it is difficult to estimate the extent of the illegal trade.

Equally illuminating is a review of the effects of existing legal provisions on export from countries of origin. Thus, crocodile skins are almost entirely imported into Singapore from Australia, and especially the Territory of Papua and New Guinea. The Act from that Territory lays down that in order to purchase crocodile skins or crocodiles, or to engage in the trade of shooting crocodiles for profit, one must hold a licence(5). Furthermore, the consent of the Director is needed for the export of crocodiles(6). However, there is a remarkable exception to these obligations allowing the trade in crocodiles as curios, if the number of animals does not exceed five hundred per person in one year(7). As to lizard and snake skins, imports originate mainly from Thailand and Cambodia. These animals are not protected in the former country and the trade in their skins is therefore not restricted. The Cambodian Act does not give much information. However, it should be taken into consideration that there are snake farms in Thailand from which some of this export may originate. West Malaysia seems to provide Singapore with fairly large quantities of insects, reptiles, birds and animals not intended for food. Export is allowed under licence(8).

Export from Hongkong is prohibited except under a special permit : (a) of any game mammal, or any part thereof, or (b) of any wild bird killed or taken in the colony(9). In view of the fact that trade statistics reveal that there is a large export from Hongkong of ivory and live animals not intended for food, it must be concluded that a special permit is easily obtained. It also follows that persons trading with birds not taken in the colony are exempt from the obligation of holding a permit. Furthermore, there is a huge export of fish for aquaria and bird feathers, none of which is covered by the provisions mentioned above.

(1) 78. Sec. 7

(6) 16. Sec. 11

(2) 79. Sec. 4

(7) 16. Sec. 4

(3) 78. Sec. 9

(8) 60. Sec. 43

(4) 79. Schedule 1 and 2

(9) 29. Sec. 9 and 17

(5) 16. Sec. 5

The Australian States have rather uniform provisions regarding export of live animals, birds, carcasses, skins and eggs. These provisions generally, however, refer only to fully protected or partially protected species. The trade may take place between states and a state and country under a licence. In South Australia import and export must also be in accordance with the laws of the state or country of import or export. An import permit will thus not be granted if the animals were taken in contravention of the laws of any other state or country(1).

In New Zealand no-body may, without the prior written authorisation of the Secretary for Internal Affairs, export any bat, bird, reptile, amphibian, land mollusc or species generally believed to be extinct(2). The Secretary may require the applicant to satisfy him that a permit for its importation into the country to which it is proposed to be exported has been granted by the authority in that country. A general provision in the Customs Act enables the Governor General to prohibit exportation of goods which, in his opinion, are necessary for the preservation of the local fauna and flora.

The States of India mostly provide that wildlife may not be exported unless the person in question - in accordance with the 1933 London Convention - holds a certificate of ownership(3). The certificate is issued by the Wildlife Preservation Officer and indicates that the holder is in lawful possession of the trophy or game. Furthermore, and again in conformity with the London Convention, no person may transfer ivory or horn which has not been weighed, marked and registered in the prescribed manner and returned together with a certificate of ownership(4). By export is meant to take out of the respective state "otherwise than across a customs frontier".

The legislation in Thailand indirectly prohibits the exportation of so-called reserved animals which are fully protected(5). Trade in protected animals, however, may take place provided permission has been obtained from the competent officer(6). Trade in flesh of protected animals of the first category is prohibited and results from the fact that these animals may not be killed. Flesh from protected animals belonging to the second category may, however, be traded under licence(7).

In Nepal the Government "may ban and prohibit the export of wild animals and their parts to foreign countries and their import or export by any agency from one district to another"(8). A licence is necessary for the capture and export of any wild animal. No restrictions in respect of hunting during the close season shall be made in such a licence(9).

In Ceylon regulations may be made prohibiting also the exportation of any specific plant(10). Ceylon exports fish for aquaria to some extent; however, there is no provision restricting this trade.

(1) 5. Sec. 61

(6) 81. Sec. 15

(2) 67. Sec. 56

(7) 81. Sec. 16

(3) For instance, 34. Sec. 37

(8) 65. Sec. 6

(4) For instance, 34. Sec. 43

(9) 66. Sec. 21

(5) 81. Sec. 14

(10) 28. Sec. 42

Under no conditions may rhinoceros be exported from, or imported into, Burma. No living animal or any part or product of the elephant, or egret's feathers, may be exported or imported except under licence. This provision does not, however, apply to any such part or product which has by a process of bona fide manufacture lost its original identity(1).

Conclusions

It is obvious that, even now, much can be done to restrict the trade in wild animals by the aid of existing legislation. The reason why the results so far do not seem to have been very promising is most certainly owing to difficulties in enforcing the laws. The illegal trade is probably considerable. Also there is, in certain countries, an economic aspect involved which may constitute a hindrance to a desired restriction of the trade. Although the economic value of this trade is mostly negligible from a national income point of view, it seems likely that many of the countries in the region welcome even the smallest contribution in foreign currency. There is reason to believe that the economic aspect is closely connected with the tendency to issue in a rather liberal manner the necessary licences and permits. It would therefore be worthwhile perhaps to examine the practices of the authorities charged with issuing these licences and permits.

A problem which became apparent during the preparation of this study was the existence of a need for information regarding protected animals on the part of customs personnel. There is reason to believe that many of these officers do not recognise protected animals. Accordingly, measures should be taken to instruct them. Preferably, a brochure with good pictures based on the IUCN Red Data Book, should be prepared and distributed among customs officers and others dealing with trade in wild animals in the region. The 1933 London Convention has, as has already been mentioned above, paid attention to this problem; however, this useful paragraph has not been incorporated into any of the laws in the region.

A pre-requisite for a successful reduction of the trade is co-operation between countries of export and import. A first step - while waiting for the Convention on the Export, Import and Transit of Certain Species of Wild Animals and Plants which is under preparation by IUCN - could be to incorporate into national legislation the Australian system of not allowing export or import if it does not take place in accordance with the laws of the countries of import or export(2).

However, the best remedy for controlling and reducing the trade in wild animals and their products is an international agreement between the countries involved as exporters and importers of the animals. Particularly since some countries concerned seem reluctant, for economic reasons, to take steps to reduce their trade which, according to them, would then only be transferred from their territories to the territories of other countries, which would then take advantage of the situation.

(1) 25. Sec. 11

(2) It should be mentioned here that recently an Act has been passed in the United States which prevents the importation of endangered species of fish and wildlife into the country. ("An Act to prevent the importation of endangered species of fish and wildlife into the United States", 5/12 1969).

X. GENERAL CONCLUSIONS

As has already been mentioned in the Introduction, one of the recommendations made by the 1965 Bangkok Conference on Conservation of Fauna and Flora in Tropical South-East Asia was that a comparative legal study of existing wildlife and national park legislation for the region should be undertaken. It was hoped that such a comparative study would form the necessary background for the preparation of guidelines and for improvements in national legislation, thus contributing to safeguarding the dwindling fauna and flora in South-East Asia.

Upon completion of the examination of existing legislation and after having made the study tour to some selected countries in Asia, including visits to a number of national parks and wildlife preservation areas, as well as discussions with various government officials, the main conclusion is that the reasons for the existing insufficient protection of the fauna and flora are not only of a strictly legal nature. They include such factors as population density, which often causes habitat destruction or results in a heavy pressure on various preservation areas; public education and the consequent awareness of the value of wildlife and national parks; the general economic situation of the country as a measure of its capacity to set aside suitable areas as preservation areas, and to allocate sufficient personnel, equipment and funds for their management. The most fatal consequence from a legal point of view, however, is that with few exceptions (Australia and New Zealand) law enforcement is most inadequate. This is because the administrative infrastructure of the countries concerned is not yet capable of implementing the laws. It should also be recalled that for the moment, at least, fauna and flora conservation and management have a very low priority in most developing countries. This, after all, is not unduly surprising since general opinion is that more immediate needs have first to be solved. However, it should be mentioned that some countries in the region, like India, Malaysia (Sabah) and Nepal seem to be aware of the potential possibilities of national parks and reserves as a means of attracting tourism. This, therefore, would seem to indicate the need for a higher priority to be given to these subject matter fields.

There does not seem to be much hope that law enforcement in the region will improve essentially in the near future and so it is probably unrealistic to expect too many threatened species to be left by the time the present legislation (with or without improvements) is adequately enforced. The immediate aim should therefore be to find other effective means of saving the threatened fauna and flora. One, and probably the most effective solution at present, would be to select and develop suitable areas where wildlife is still abundant and the habitat intact, or to which wildlife could be re-introduced from other parts of the country in question. Supervision of these areas should be strictly enforced by adequately trained game wardens posted at every strategic point.

Since it was felt that an international convention on fauna and flora might be of help in promoting conservation efforts, the authorities of the countries visited were questioned regarding the desirability of preparing such a convention. Little interest was shown; however, most countries indicated that they would appreciate receiving a document, including guidelines, for the preparation of national legislation in these fields, and guidance and assistance in forming or revising their national legislation.

As to the question of guidelines which would serve to improve national legislation, where this is insufficient it should be emphasised that from a legal point of view it is unsatisfactory to establish laws which one knows almost certainly cannot, for the time being, be properly enforced. The consequence might be a lack of respect for the law, resulting in partial or total ineffectiveness, a situation which might later prove difficult to remedy. It is preferable that laws be adjusted to work effectively within the present national framework, taking into full account the stage of development of the society itself; only thus have they a chance of being understood and successfully enforced. Therefore, simple but effective provisions should be created which allow for a

proper evolution or progress in order to meet new requirements. Explanatory notes should, where necessary, accompany such enactments.

Concerning an international agreement covering the trade in wild animals and their products, the possibilities of restricting or stopping this trade altogether by means of a convention should be examined. A convention on the trade in wild animals is, as has been mentioned above, under preparation by IUCN. Since some countries are indifferent or reluctant to restrict this trade, it will be necessary to seek co-operation from the importing countries, mainly Europe and North America. It is to be hoped that an awareness of the necessity of taking firm measures against this trade already exists in these countries.

More specifically, many of the observations of a legal nature made in preceding chapters are worth repeating. These include, in summary:

Improvement in law enforcement, in particular with regard to trade in wild animals and poaching (as to poaching, it should be mentioned that in some countries in regions such as India and Indonesia, army personnel seem to be the worst offenders).

Establishment of wildlife conservation and management acts in countries or parts of countries which do not have any conservation legislation. This is at present true for Afghanistan, India and East Pakistan (lands outside reserved and protected forests and controlled and vested forests, respectively), West Pakistan (special areas), Indonesia (except for Java and Madura) and the State of Sabah, Malaysia (hunting legislation).

Prevention of habitat destruction (cattle grazing, forest exploitation and human settlements within protected areas). This is without any doubt the most serious threat to conservation efforts throughout the whole region. In some legislation, habitat destruction is prohibited but the laws are not adequately enforced. Several Indian States, West Pakistan, Nepal, Philippines (regarding sanctuaries) and Malaysia (except for two national park acts) have no provisions on habitat preservation.

Preparation of a convention restricting the trade in wild animals and their products, and also the preparation and distribution of a brochure, giving illustrations of endangered species to customs officers and others concerned.

Establishment of detailed objectives of various types of protected areas so as to be able to define them clearly in the relevant enactments. Such areas should, if possible, consist entirely of public land in order to guarantee their continuance and to facilitate their proper management. Where non-existent, the right of expropriation should be provided for. The boundaries surrounding preservation areas should be marked and maintained through regular maintenance activities.

Laws should be kept up to date; particularly the schedules listing protected and unprotected animals which need to be amended continually to reflect the actual situation.

Animals killed in contravention of existing laws, in self-defence, or when causing damage to livestock or standing crops, to be considered always as state property in order to prevent the present frequent abuse of these rights.

Possession of an arms licence to always be a condition for obtaining a game licence. The applicant for an arms licence should undergo a test to show his skill in shooting.

The obligation of holding a game licence to be also applicable to exempted categories of persons, such as state officials, etc., and indigenous people who enjoy the privilege of customary hunting rights (India and Pakistan).

XI. - GUIDELINES IN ESTABLISHING NATIONAL LEGISLATION
ON WILDLIFE AND NATIONAL PARKS

The purpose of this part of the study is to present in summary form a check list of the basic and most important legislative provisions pertaining to wildlife and national parks. Because these provisions represent, on the whole, the minimum legal framework necessary to ensure sound wildlife management policies, they should, wherever possible, be included in a basic act, embracing both the protection and management of wildlife and various protected areas. It may be advisable to have detailed provisions on licences, close seasons, bag limits and administration laid down in regulations under such a basic act.

The check list is not intended to be exhaustive. Some provisions which are normally found in any basic act or regulation, such as those regarding detailed administrative provisions, penalties, etc., are omitted. These provisions are not peculiar to wildlife and national parks legislation; in addition, they are by their very nature dependent in their form and content on the socio-economic conditions of the country or region to which they apply.

A. - Objectives of basic wildlife and national parks legislation

There should be, wherever possible, mention of the objectives and the policies which should be implemented by the legislation. These objectives and policies should include, for example, the protection of the wild fauna and flora, in particular, the preservation of those species, together with their habitat which are faced with extinction; the rational utilisation and management of the wild fauna and flora to ensure an optimum sustained yield within the framework of a national land use policy; the protection and management of protected areas.

B. - Protected areas

Protected areas vary from country to country, though in the case of national parks definitions seem to be fairly uniform. Consideration should be given when providing a definition of these areas to economic, geographical, biological and other conditions in each country or region. In all probability, different objectives will be assigned to each of these areas and it might therefore seem difficult to suggest definitions of them. Although it may not be feasible to set aside in a given country all the various types of areas for which definitions are given below, it is felt that at least a need for some of them should be found in each country.

1. - Strict natural reserve

The term "strict natural reserve" should denote an area :

- (a) placed under the control of the state, the boundaries of which must not be altered, nor any portion subject to alienation except by the competent legislative authority;
- (b) set aside to permit the free interaction of natural ecological factors without any outside interference whatsoever, excepting that judged indispensable by the competent scientific authorities for the safeguarding of the very existence of the reserve;
- (c) throughout which any form of hunting or fishing, any undertakings connected with forestry, agriculture or mining, any grazing, any excavations or prospecting, drilling, levelling of the ground or construction, any work involving the alteration of the configuration of the soil or the character of the vegetation, any water pollution, and, generally, any act likely to harm or disturb the fauna or flora, and the introduction of any exotic animal or plant species is strictly forbidden;

- (d) where it is forbidden to reside, enter, traverse or camp and which it is forbidden to fly over, without a special written permit from the competent authorities, and in which scientific investigations may only be undertaken by permission of those authorities.

2. - National Park

The term "national park" should denote an area:

- (a) identical with (a) - "strict natural reserve" - above;
- (b) set aside for the protection and conservation of outstanding natural animal and plant communities, geological formations and areas of natural scenic beauty, for the enjoyment of present and future generations in a manner consistent with the management of the resources, and for scientific, cultural, educational and economic purposes. When occasionally outstanding historical and archeological remains or sites are found within and forming part of the significance of the areas as defined in the previous sentence, these features or sites may be managed as part of the resources of the national park;
- (c) in which hunting, killing or capturing of fauna, destruction or collection of flora and other objects is prohibited except for scientific and management purposes, and on condition that these purposes are pursued by, or under the control of, the park authorities.

The activities prohibited under "strict natural reserves" (c) and (d) should also be prohibited in national parks, except where they are necessary to enable the park authorities to carry out the provisions of paragraph (b) above, or to enable the general public to visit national parks.

3. - Sanctuary

The term "sanctuary" (wildlife sanctuary, game reserve, wildlife refuge, etc.,) should denote an area:

- (a) set aside for the conservation and management of wildlife and the protection and management of its habitat;
- (b) within which hunting shall be prohibited except by, or under the direction or control of, the reserve authorities;
- (c) where settlement and other human activities are restricted or prohibited.

4. - Special reserve

The term "special reserve" (nature monument, national monument, etc.,) should denote an area:

- (a) set aside to protect wild animal or plants species (special emphasis is given to species threatened with extinction) either as individuals or as populations and, in the case of wild animals, to ensure sufficient habitat for their survival;
- (b) set aside for the protection of outstanding geological formations, historical and archeological objects or sites (that sites or objects of historical and archeological significance may also occasionally be included in national parks has been mentioned under national parks);
- (c) in which all other interests and activities are subordinated to this end.

C. - Acquisition of land for inclusion in protected areas

Rules should be laid down for the procedure when acquiring lands to be comprised in a protected area. Preferably such lands should be made state property so as to ensure adequate and uniform management of protected areas. Expropriation should accordingly be provided for.

D. - Establishment of protected areas

The overall importance of strict nature reserves and national parks and the vast areas which are often comprised in them require their establishment by act of parliament, or the equivalent, while the establishment of other protected areas should normally be the responsibility of the Minister in charge of wildlife and national parks, normally the Minister of Agriculture.

E. - Demarcation and fees

To avoid as far as possible encroachments on protected areas, it is advisable that places within or on the boundaries of, and particularly on access roads to protected areas, provisions be made for notices to be erected indicating:

- (a) the kind of protection afforded to the area;
- (b) the extent of the area set aside (map);
- (c) the penalties resulting from any contravention regarding prohibited activities within such an area.

The boundaries should be marked and the notices properly spaced and checked at regular intervals.

The administrative body responsible for protected areas should be empowered to charge entrance and other user fees where consistent with local policy and where necessary or desirable to help cover the costs of management, maintenance and development of these areas.

F. - Buffer zones

It may sometimes be necessary to establish so called buffer zones around the boundaries of protected areas. Such buffer zones may consist of a strip of public or private land of varying width adjacent to a protected area and managed in a manner compatible with such protected area and yet sometimes used for other land purposes such as timber production, agriculture and tourism. The buffer zone should be managed in such a way as to absorb fire, pollen, erosion, pollution, noise, free ranging domestic animals or other elements considered detrimental to the integrity of the protected area.

National and local bodies empowered with administrative and advisory functions, may be established. National bodies should be vested with an overall responsibility of the national park and wildlife resource on an advisory basis, while local bodies should be charged with the responsibility for a specific protected area.

H. - Officers

For the administration of the Act at the local level, officers having the necessary technical and educational qualifications for the administration and management of wildlife and national parks, should be appointed.

These officers should, inter alia, be empowered :

- (a) to arrest any person committing or suspected on reasonable grounds of having committed an offence against legislation and detain him until his full name and place of residence are ascertained;
- (b) to demand any person suspected of any act for which the holding of a licence is required to produce such a licence for inspection;
- (c) to enter and search where there is reasonable grounds to suspect that an offence has been committed against the legislation;
- (d) to inspect and examine any animal or product thereof;
- (e) to seize any animal or product thereof;
- (f) to hold enquiries into offences.

I. - Appointed officers deemed to be public servants

It may be advisable to give officers the status of public servants in order to give them an increased protection against all kinds of verbal or physical violence in the performance of their duties.

J. - Protected animals and plants

It should be laid down that all wild fauna, protected or not, irrespective whether found on public lands or private lands, belong to the state, which should be made responsible for its management and protection. Specifically designated animals and plants, the hunting, collection or destruction of which is forbidden owing to their rarity, should be listed as protected fauna and flora. The possession of such protected animals and plants should be considered an offence.

(Occasionally it may be wiser to protect all wild fauna, except those animals listed as game animals).

K. - Game animals, close seasons, bag limits and minimum sizes

By the term "game animals" it should be understood those listed wild animals which may be hunted for sport under a licence.

In order to enable the responsible department to regulate the rational utilisation of the resource at an acceptable level a system of close seasons, bag limits and minimum sizes should be established. During a close season, hunting is prohibited either generally or with regard to a particular species or family of species. Bag limits restrict the number of animals which must be taken during a certain time period (daily, weekly, monthly, yearly, seasonally). To avoid over-exploitation, it may be sometimes necessary to restrict the hunting of certain species below a certain minimum size.

L. - Regulations for the implementation of the Act

It is of great importance to have a clause empowering the relevant Ministry to issue and, whenever necessary, revise regulations amending the lists of protected species, plants and game animals, close seasons, bag limits and minimum sizes. This makes it possible for the regulations to be re-examined and revised to keep pace with technical, social and economic changes by avoiding the complicated and time-consuming procedure of having to submit amendments to the legislation to the law-making body.

M. - Sporting game licences

Game animals should be hunted only on the condition that a hunting game licence has first been issued by a specifically designated authority.

The applicant for a sporting game licence should state the locality where he intends to hunt, the period during which hunting is going to take place, the species to be shot and the weapons to be used.

A sporting game licence should be personal and valid not longer than one year. It should be issued only to persons above the age of 18 years (or that age considered consistent with prevailing conditions in the country concerned) in possession of a firearms licence. Limitations, restrictions, terms and conditions, such as close seasons, bag limits, minimum sizes and locality where the hunting may take place, may be prescribed.

For the purpose of controlling the actual game harvest it may be useful to lay down that the licensee must keep a record of the game killed, which record should be submitted to the issuing authority after expiry of the licence.

Hunting should be exercised on public as well as on private lands. In the latter case the hunter should have to ask the private land-owner for permission to hunt on his properties.

Hunting should under no conditions be carried out inside protected areas except by authorised personnel when necessary for management purposes.

In the context of licences, it would be advisable to define the term "hunt". This could be defined as the killing, taking, trapping or capturing of any wildlife by any means, the pursuing, disturbing or molesting the same, as well as every attempt to hunt or kill wildlife and every act of assistance of any other person.

N. - Scientific hunting and capture licences

The granting of licences entitling individual scientists or individuals in biological institutions of repute to hunt or capture specified numbers of species of protected animals for the purpose of scientific research or collection for zoological gardens, museums or similar institutions, should rest with the relevant Ministry.

O. - Commercial capture and trade licences

A licence to hunt and trade in animals (with the exception of protected animals) and their products should first be granted by the relevant authority to qualified persons before the latter engage in these activities. The licence should entitle the holder to hunt specified numbers and species of game animals and non-protected animals in specified areas outside protected areas.

The licensee should keep a record of the number and species of animals killed or captured, which record should be submitted annually to the relevant authority.

P. - Firearms licences

A sporting game licence should be issued only to the holder of a firearms licence. The applicant for a firearms licence should be made to undergo a test as to his shooting ability and general knowledge of hunting wild animals. It is advisable to establish a minimum age limit for the possession of such a licence.

Q. - Suspension and revocation of licences

In addition to fines and other penalties, the possibility of suspending or revoking the above mentioned licences should be provided for, if the licensee fails to comply with prescribed conditions or if he has contravened the provisions laid down in the Wildlife Act.

R. - Export and import of wild animals and trophies

It is essential that the export and import of wild animals and trophies be adequately regulated.

It should therefore be laid down that a necessary pre-requisite for a lawful export or import is the possession of a licence issued by the relevant authority. Furthermore, it should be explicitly laid down that a licence does not entitle the holder to export or import any wild animals or trophies taken in contravention of national laws or in contravention of the laws of any other country.

S. - Recognition of protected species

In order to render the prohibition on all dealing in protected species effective, appropriate illustrations of these animals should be prepared and circulated to Customs officers and others engaged in the trade of wild animals and their products; or the same persons should be otherwise instructed in the methods of identifying protected species and trophies derived therefrom.

T. - Unlawful hunting methods

Below an enumeration is made of those hunting methods which might be considered illegal. (It is understood that it may not be necessary to legislate against all methods since some of them may not be applicable in a given country or region):

- the use of motor vehicles, motor boats or aircraft, whether moving or stationary, either for the purposes of hunting, capturing or killing, animals, or willfully to disturb, drive or stampede them for any purpose whatsoever except when these methods are employed by the competent authority or under its direction or control;
- the use of fire to hunt, capture or kill animals;
- the use of military weapons and also of any firearm capable of firing more than one cartridge as a result of one pressure of the trigger, or re-loading itself without further action by the operator, it being ensured that the appropriate firearms are used which under normal conditions are capable of killing the animal outright;

Furthermore, hunting, capturing or killing of animals may be prohibited:

- by night, with or without the assistance of lighting or dazzling equipment;
- by use of drugs, poison, poisoned weapons and baits, or radioactive substances;
- by use of nets, pits or enclosures, traps or snares, or of set guns or explosives;
- with the assistance of electrical sounding devices such as recording machines or other electronic equipment;
- with the aid of any form of hide except where these methods are employed by the competent authority or under its direction or control.

U. - Customary rights

Since customary rights - if excessively exercised - may be a threat to wildlife, it might be worth considering the restriction of these rights. (Preferably, customary hunting should be exercised under licence). Also other types of customary rights, such as domestic animal grazing or forest exploitation within protected areas, should as far as possible be prohibited or restricted. When, exceptionally, customary rights may be exercised within a particular protected area, a statement to that effect should be incorporated in the declaration of that area.

V. - Animals causing danger and damage

When occasionally certain species or individual animals constitute a danger or cause damage to life or property, authorisation to destroy these animals should be provided for. The destruction should be controlled or carried out by officers so as to exclude any possible abuse of this right.

W. - Legitimate defence

The fact that certain animals are protected animals or that certain hunting methods are prohibited should not prejudice the right of legitimate defence of life or property exercised in good faith in case of immediate and absolute necessity.

To prevent abuse of this right, it should be laid down that in all cases where an animal is found dead or is accidentally killed or killed in legitimate defence, the carcass and trophy should become property of the state.

Furthermore, if the animal is a protected animal, a report should be submitted immediately to the competent authority.

X. - Breeding grounds

In some countries there may be a need for the establishment of so-called breeding grounds designed to allow breeding of wild animals in captivity for economic and industrial purposes, or for the propagation of protected species.

TABLE SHOWING EXISTENCE OF VARIOUS HUNTING LICENCES IN THE COUNTRIES COVERED BY THE STUDY

Country	Sporting Game Licences	Scientific Hunting & Capture Licences	Commercial Capture and Trade Licences	Licences for Killing Dangerous Animals & Animals Causing Damage	Pirates Licences
<u>Australia</u> <u>Victoria</u> (2) (1)	41 (2)	39	40	33 (35 and 37?)	
South Australia(5)	68	40(1)	58	40(1)	47-48
Western Australia(8)	17 B		17 (2) (e), 17A	15(1e)	
Tasmania(12)	44(1)	21(1)			
Territory of Papua & New Guinea(15)		15			
Northern Territory of Australia(19)	35	53			
Queensland (23)	20, 24	38	41	21	
	4-6		8-9		
Burma (26)	3-12				15
Cambodia (27)	15-19	14	21		3 (1)
Ceylon (28)	12	40(2) and 55(1)	49	13	
Indonesia (30)		3(1)c			
	1(2) and 4(1)	9(1)		4(5)	
India Maharashtra(34)	9 and 11	13	33		10

Country	Sporting Game Licences	Scientific Hunting & Capture Licences	Commercial Capture and Trade Licences	Licences for Killing Dangerous Animals & Animals Causing Damage	Firearms Licences
Gujarat (36)	9 and 11	13	34		10
Himachal Pradesh (37)	13 and 18				12
Madras (38)	IIIa and Schedule I and II				
Punjab (41)	4(a) to (d)		4e		
Jammu & Kashmir (42)	8				
Goa, Daman & Diu (45)	7 and 9	11	27		8
Rajasthan (49)	6 and 10	6(viii) and 13			
Manipur (50)	1, 2 and 4-7	1			
Andhra Pradesh (51)	15 and 18-19				
Assam (52)	10-11				
(53)	2	4			
Madhya Pradesh (55)	3-4				4
(56)	5				
(57)	6 and 13				

Country	Sporting Game Licences	Scientific Hunting & Capture Licences	Commercial Capture and Trade Licences	Licences for Killing Dangerous Animals & Animals Causing Damage	Firearms Licences
<u>Iran</u> (59)	11 and 12		14		17
<u>Federation of Malaysia</u> (50)	26 and 28		41		17
<u>Nepal</u> (55)	3-5				
(66)	6(a) - 7	16 (2)			
<u>New Zealand</u> (67)	19(1) and 20	53			
<u>Pakistan</u> (71)	6			17	
(72)	4				
(73)	20(1), 22, 23 & 25				26
<u>Philippines</u> (74)	8-9				
<u>Thailand</u> (81)	10-11	7			

(1) Refer to the Act corresponding to the same number in the Index

(2) Refer to the relevant section in the Act

TABLE SHOWING PROHIBITED HUNTING METHODS IN THE COUNTRIES COVERED BY THE STUDY

Country	Use of motor vehicles, aircraft, etc.	Use of explosives, traps, nets, set-guns, etc.	Use of dogs	Use of wastifactory arms and ammunition etc.	Use of dazzling lights, flares, etc.	Use of poisoned weapons	Use of fire	Hunting at night	Other prohibited methods	General provisions regarding illegal methods
Australia (1) Victoria (2)				12-13 (2)		11				43(d)
South Australia (5)	54		53	49		52				50
Western Australia (8)		Regulations not available								6 and 17(3)
Tasmania (12)		Regulations not available								18(o) (p)
Territ. of Papua and New Guinea (15)		11	11						11	28
Northern Territory (19)		39				50				
Queensland (23) (24)			37	36(1)(ii)	36(1)(i)	34			35	36(2)
Burma (25) (26)	10(e)	10(b)&(h)	10(i)		10(d)	10(a)			10(c)&(g)	
Cambodia (27)	34.3	34.1		14	34.2	34.1	34.4			
Ceylon (28)	30(1)c, 31(1)c&51	53(b) and 53A			52	53A		53(a)	30(1)(e) 52A&53(c)	
Indonesia (32) (33)	6(1)	6(1)&(3)		6	6(2)	6(1)&(3)	6(1)			2 and 6(1)

Country	Use of motor vehicles, aircraft, etc	Use of explosives, traps, nets set-guns, etc.	Use of dogs	Use of unsatisfactory arms and ammunition	Use of dazzling lights, flares, etc.	Use of poison & poisoned weapons	Use of fire	Hunting at night	Other prohibited methods	General provision regarding illegal methods
India Maharashtra (34)	17	17			17	17	17	17	17	
		6(2)		6(6)		6(2)				
Gujarat(36)	18(1)(2)	18(3)			18(5)	18(3)	18(4)	18(6)	18(7)	
Himachal Pradesh(37)	4 b	4b(xiii) 5(i), 27 and 43	4b(iv) and 28	4b (xi)	4(iii) and 24	4(b) (xiii)			28	
Madras (38)	III 2 (h) (2)	III 2 g (ii)			III 2 h (iii)	III 2 g (ii)			III 2 h (i)	
Punjab(41)	9 (a)			9 (k)	9 (c)	9 (b)	9 (c)	9 (e)	9 (f)	
Jammu and Kashmir (42)										
Utter Pradesh (43)		3 A								
Goa, Daman and Diu(45)	15 (1)	15 (3)			15 (5)	15 (3)	15(4)	15(6)	15 (7)	
Rajasthan(49)	2	2	2		2	2		2	2	
Manipur(50)	3	1 (b)	1(b)	3	3				3	
Andra Pradesh(51)	13(2)				13(2)	13(2)			13(1)	

Country	Use of motor vehicles, aircraft, etc.	Use of explosives, traps, nets, set-guns, etc.	Use of dogs	Use of military firearms and ammunition	Use of dazzling lights, flares, etc.	Use of poison and poisoned weapons	Use of fire	Hunting at night	Other prohibited methods	General provision regarding illegal methods
Assam (52)	9	1		9	9	1		9	9	
Madhya Pradesh (56)	22		6						11 and 21	
	3	3			3	3	3	3	3	
Iran (59)	19(h)&(1)	19(d)&(f)		19(a-c)		19(d)		18(b)	19	
Federation of Malaysia (60)		36		17	40	36		40	37(2), 38 and 39	
Nepal (66)	8(f)	8(c)		8(B)		8(D)		8(G)	8(A), (C) and (E)	
New Zealand (67)	18(f)	18(a)(b)	18(a)	18(c)	18(h)				18(g)	
Pakistan (71)	14(a)	14(o)&3(b)			14(b)	3(a)&14(c)			14(d)&(e)	
	(72)	5							6 and 8	
(73)	15		15		15			24	15	
Philippines (74)	13	13		13	13					
Thailand (81)								13		
(82)	4.2, 4	4.7		4.7	4.1	4.7		4.5	4.3	

- (1) Refer to the Act corresponding to the same number in the Index
(2) Refer to the relevant section in the Act

CONVENTION

CONVENTION RELATIVE TO THE PRESERVATION OF FAUNA AND FLORA
IN THEIR NATURAL STATE (THE LONDON CONVENTION, 1933)

AUSTRALIA

New South Wales

1. National Parks and Wildlife Act, 1967

Victoria

2. Game Act, 1958, as amended up to 1966
3. National Parks Act, 1958, as amended up to 1965
4. National Park Regulations, 1959

South Australia

5. Fauna Conservation Act, 1964
6. Regulations under the Fauna Conservation Act, 1964-1965
7. National Parks Act, 1966

Western Australia

8. Fauna Conservation Act, 1950-1967, and the Fauna Conservation Act Amendment Act, 1969
9. Parks and Reserves Act, 1895-1955
10. National Parks Board By-laws, 1963
11. Native Flora Protection Act, 1935-1938

Tasmania

12. Animals and Birds Protection Act, 1928, as amended up to 1958
13. Scenery Preservation Act, 1915, as amended up to 1964
14. Scenery Preservation Regulations, 1940

Territory of Papua and New Guinea

15. Fauna Protection Ordinance, 1966
16. Crocodile Trade (Protection) Ordinance, 1966
17. National Parks and Gardens Ordinance, 1966
18. Fisheries (Licensing) Ordinance, 1966

Northern Territory of Australia

19. Wildlife Conservation and Control Ordinance, 1962
20. National Parks and Gardens Ordinance, 1959
21. Fisheries Ordinance, 1965
22. Fisheries Regulations, 1966

Queensland

23. The Fauna Conservation Act, 1952
24. The Fauna Conservation Regulations, 1952, as amended up to 1969

BURMA

25. Wild Life Protection Act, 1936
26. Burma Wild Life Protection Rules, 1941

CAMBODIA

27. Code de Chasse et de Conservation de la Nature, 1946

CEYLON

28. Fauna and Flora Protection Ordinance, 1956, amended 1964

HONGKONG

29. Wild Birds and Wild Mammals Protection Ordinance, 1954

INDONESIA

30. Wild Animal Protection Ordinance, 1931
31. Nature Protection Ordinance Decree, 1941
32. Hunting Ordinance for Java and Madura, 1940
33. Hunting Regulations for Java and Madura, 1940

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34. The Bombay Wild Animals and Wild Birds Protection Act, 1951
35. The Bombay Wild Animals and Wild Birds Protection Rules, 1951

Gujarat

36. The Gujarat Wild Animals and Wild Birds Protection Act, 1963

Himachal Pradesh

37. Rules regarding Hunting, Shooting, Setting of Traps or Snares in the Reserved and Protected Forest of Himachal Pradesh, 1958

Madras

38. Madras Game Laws and Shooting and Fishing Rules and Licences.
39. Game Laws and Rules, General Rules to regulate the Pursuit of Game in Reserved Forests

Punjab

40. The Punjab Wild Life Preservation Act, 1959
41. Rules, 1961

Jammu and Kashmir

42. The Jammu and Kashmir Game Preservation Act, 1948 (1956)

Uttar Pradesh

43. The Wild Birds and Animals Protection Act, 1934
44. The Uttar Pradesh National Parks Act, 1935

Goa, Daman and Diu

45. The Goa, Daman and Diu Wild Animals and Wild Birds Protection Act, 1965
46. Rules, 1965

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47. The Rajasthan Wild Animals and Birds Protection Act, 1951
48. The Rajasthan Entrance to the Wild Life Sanctuaries Rules, 1958
49. The Forest (Hunting, Shooting, Fishing and Water Poisoning) Rules, 1957

Manipur

50. Preservation of Wild Life in Reserved Forests and Other Parts of Manipur, 1958

Andra Pradesh

51. The Hyderabad Game Regulations

Assam

52. Rules for the Preservation of Wild Life in Reserved Forests, 1961
53. The Assam Rhinoceros Preservation Act, 1954

Central Provinces

54. The Wild Birds and Animals Protection Act, 1912

Madhya Pradesh

55. The (Madhya Pradesh) Game Act, 1935
56. The Madhya Pradesh Game Rules, 1926
57. The Madhya Pradesh National Parks Act, 1955
58. The Madhya Pradesh Forest Rules, 1963

IRAN

59. Extract from the Game Laws and Regulations, 1349 (1970-1971)

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60. The Wild Animals and Birds Protection Ordinance, 1955
61. The Fauna Conservation (Turtle Farms) Regulations, 1964
62. The Fauna Conservation Rules, 1965
63. The Taman Negara Enactment, 1939
64. The National Parks Ordinance, 1962 (Sabah)

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65. The Wild Animals (Protection) Act, 2015 B.E. (1957)
66. The Hunting Rules, 2023 B.E. (1965)

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67. The Wildlife Act, 1953, as amended up to 1964
68. The National Parks Act, 1952
69. An Act to provide for the Protection of Native Plants, 1934
70. Nature Conservation Council Act, 1962

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71. Rules to Regulate Hunting, Shooting and Fishing within the Controlled and Vested Forests, 1959 (East Pakistan)
72. The West Pakistan Wild Life Protection Ordinance, 1959
73. West Pakistan Wild Life Protection Rules, 1960

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74. An Act for the Protection of Game and Fish
75. Closed Seasons and Regulations for Certain Game and Other Wildlife, 1939
76. An Act Providing for the Establishment of National Parks Declaring Such Parks as Game Refuges, and Other Purposes
77. An Act Creating the Commission on Parks and Wildlife, Defining Its Powers, Functions and Duties

SINGAPORE

78. The Animals and Birds Ordinance, 1965
79. The Animals and Birds (Importation) Order, 1966
80. The Nature Reserves Ordinance, 1951

THAILAND

81. The Wild Animals Reservation and Protection Act, B.E. 2503
82. Hunting Regulations
83. The National Park Act, B.E. 2504