

# ABSTRACTS

## The Operation of a Bird of Prey Sanctuary as an Educational Tool

James J. Brett

Hawk Mountain Sanctuary, in the north-eastern Pennsylvania (USA), was founded in 1934 to halt the shooting of raptors along the Appalachian ridge and for many years remained a small, local institution. To-day it is supported by 7,000 members and visited annually by over 45,000 people. There are seven full-time staff, a corps of over 100 volunteers and from 7 to 10 interns every year.

The prime mission of Hawk Mountain Sanctuary is education. Programs involve many thousands of school children each year. In addition, seminars, workshops, academic courses and field trips focus on local and global raptor conservation concerns. Students come from throughout the world to be trained in education, management and research.

Each autumn some 25,000 raptors of 15 species pass by the famous North Lookout. Hawk Mountain Sanctuary also has a small museum and exhibit area, a bookstore, an education centre and several miles of woodland trails. Programs for the general public highlight raptor conservation, migration dynamics and live bird of prey demonstrations.

James J. Brett  
Hawk Mountain Sanctuary Assn.,  
Route-2, Kempton, PA 19229, USA.

## Raptor Education in Southern Texas, Southern Mexico and Adjacent Central America

J. Clinton-Eitniew

In 1986 five thousand raptor educational posters were distributed in southern Texas, southern Mexico, Belize and Honduras. The posters were designed and printed in the United States with the co-operative assistance of the National Wildlife Federation and Aid of International Develop-

ment, USA. A number of problems encountered throughout the process are discussed as well as specific details regarding the distribution of materials in Belize, Central America. In 1987 we will produce/distribute ten thousand further raptor educational posters to 14 facilities in 8 countries. The 1985 effort involved 11 facilities in 4 countries.

J. Clinton-Eitniear  
Centro de Estudios de las Aves Tropicales,  
218 Conway, San Antonio, Texas 78209-1716, USA.

# Methods, Achievements and Problems of Promoting Public Awareness and Education for the Conservation of Birds of Prey in the Federal Republic of Germany

Wolfgang Erz

Education for the improvement of conservation of birds of prey has to be integrated into a better general understanding and acceptance among the general public. Considerable improvements have been achieved since the war: firstly by demonstrating the heavy decline of nearly all species of birds of prey; and secondly by altering the German name of "raptatory birds" (Raubvögel) into "catching birds" (Greifvögel), i.e. from a term of "criminal nomenclature" into a designation of the birds' behaviour.

Direct approach by conservationists to the crucial target group of hunters has been more or less a failure. Influence on this group has been reached through public understanding and public pressure, in which the use of mass media seems to be more successful than formal education even in the long run.

Good results have been obtained through "education by encountering" (i.e. observation of birds of prey outdoors and interpretation of their biology) and "education by involvement" (i.e. by involving people in raptor conservation projects. Passive education (e.g. exhibitions, live birds in zoos) does not have the same impact. Good achievements have been made by special training projects for school teachers.

The most encouraging, although very limited, attempts at reaching better understanding by hunters were achieved by "active projects", i.e. co-operative actions between hunters and conservationists, e.g. reintroduction projects or guarding of nest sites, etc. "Passive approaches" do not show adequate results. Thus active forms of education and promotion of public awareness should play the major role in all attempts to improve the present situation.

Wolfgang Erz  
Centre for Nature Cons. & Landscape Ecology,  
Konstantinstr. 110, D-5300 Bonn 2, FRG.

# Raptor Education in Africa: Problems and Suggestions, with Specific Reference to Southern Africa

Johan Van Jaarsveld

Today Africa, with a population close to 750 million, can as a whole not support its own social needs. Several countries are experiencing severe drought and the demands on natural resources are ever-increasing. This leads to over-population of the habitat which ultimately affects the diverse raptor population. Africa's original 2.1 million km<sup>2</sup> of tropical rain forests have been reduced by 55%.

First World countries are responsible for the destruction of most of Africa's forests. They also use Africa to dispose of large amounts of pesticides and chemical toxins banned by law in their own countries.

The biggest single problem in raptor protection in Africa is education. Not only raptor education, but resource education. In the south 87.2% of the rural population had no income during 1980. They depended on natural resources to provide food for them. However, the proclamation of large portions of land as national parks restricts the rural population in their attempts to survive. They derive no benefit from these parks and have no appreciation of what conservation inside its boundaries means. Large conservation areas must offer the opportunity to develop and educate the rural population. By making meat, wood, grass (for thatching) available, wildlife agencies can enable the locals to re-evaluate the necessity of the national parks. By thus protecting some sensitive areas, as has been suggested by many authors, agencies can provide not only protection for their habitat, but also for their raptors.

Johan Van Jaarsveld  
Africa Raptor Information Centre,  
Private Bag X11, Parkview 2122, South Africa

## The Protection of Nocturnal Birds of Prey with Adolescent Pupils in a Swiss High School

Michel Juillard

Each year, in June, 16-19 year-old pupils of Porrentruy High School (Jura, Switzerland) are able to take part in a week's study outside the normal curriculum. They can choose from topics presented by the teachers or make suggestions themselves as to the activities carried out in collaboration with the teachers.

For several years the author has attempted to interest adolescents in getting to know and protect nocturnal birds of prey. He criticizes the different methods used and presents his conclusions. Field work in areas distant from school camp organisation, direct observation of birds and

practical work in connection with their feeding habits are the most motivating activities for young people. To be attractive, these must be preceded or accompanied by explanations and extra observations conducted in the class-room, and must end with a general report if the educational goal is to be reached.

Michel Juillard  
Biology Laboratory, Lycée cantonal,  
CH-2900 Porrentruy, Switzerland

## Raptor Education for Secondary School Students

Debbie Keller

The High School Hawk Watch is a field research project which teaches raptor study and identification, field research techniques, data gathering and analysis of migration information. Designed by the New Jersey Audubon Society, the project utilizes one of nature's greatest spectacles, the migration of diurnal birds of prey, to broaden student awareness, while conducting real research on the hawk migration. Students establish observation sites at their schools, then monitor the raptor flight. Their data are recorded by research guidelines established by the Hawk Migration Association of North America. The student/HMANA co-operative information exchange has shed new insight into the migration in New Jersey.

The Hawk Watch Project has worldwide application. A project text: "Hawk Watch: A Guide for Beginners", authored by Pete Dunne, Debbie Keller and Rene Kochenberger, assists in the implementation of the Hawk Watch program and serves as a field and data interpretation manual.

Debbie Keller  
New Jersey Audubon Society, Cape May bird Observatory,  
Cape May Point, New Jersey 08211, USA

## IRIC Educational Projects as a Model for Young Countries

Yossi Leshem

The Israel Raptor Information Center (IRIC) was established in 1980 as a joint project of the Society for the Protection of Nature in Israel (SPNI) and Tel Aviv University. In the seven years of its existence, the IRIC has succeeded in effecting a fundamental change in public awareness in Israel on the subject of birds of prey and their protection. In contrast to the handful of individuals that had previously dealt with the subject, today thousands of people all over the country take a

special interest in birds of prey. Furthermore, the topic has reached almost every home in Israel.

This paper presents some of the principal methods and modes of reasoning that formed the basis of our efforts, with the aim of encouraging other countries to emulate these and apply similar systems. These ideas are most relevant to young and developing countries, where the problems associated with the protection of raptors are especially severe and the issue of public education is of supreme importance.

Yossi Leshem  
Israel Raptor Information Center (IRIC),  
The Society for the Protection of Nature in Israel (SPNI),  
Har Gilo, Doar Na Harei, Jerusalem 91076, Israel

## Creation of Educational Awareness for the Conservation of Birds of Prey

Sohrab Uddin Sarker

This paper is based on experience in the field since 1968, observing raptors and their habitats in Bangladesh. At the same time a cross-section of people in villages and towns was tested for their knowledge of and attitudes towards raptors.

Education must play an important role in creating awareness among the people for the conservation of raptors in Bangladesh and other countries. In addition to printed propaganda, films, public meetings and conferences are important components of any educational activity. Also exhibitions, zoos and museums may play a significant part. Identification, economic value, significance in nature and means to conserve endangered or rare species should be the prime consideration. Conservation should be included in the syllabus of schools and colleges; education centres should also be set up throughout the country; but to achieve all these aims, financial and technical support from international organisations are essential.

MD Sohrab Uddin Sarker  
Dept. of Zoology, University of Dhaka, Dhaka-2, Bangladesh

## The F.I.R. and Protection of Raptors in France: Traditional and New Activities

Michel Terrasse

Official protection of birds of prey in France dates from 1972, following a long period of systematic destruction, primarily by hunters. To gain acceptance of this new legislation and ensure its application, a new method of communication had to be adopted.

The F.I.R., also established in 1972, sought to fulfil this need by bringing together all devotees of raptors, not only in France but also in Belgium, Switzerland and, later, in Italy, Portugal and Spain. Its activities were aimed first and foremost at hunters: leaflets, posters and campaigns making use of all the media, followed by education of the general public and children by means of countless lectures, film and television shows, etc.

In addition to these "traditional" techniques, the F.I.R. has sought to develop other activities such as mobilising thousands of volunteers to warden the eyries of threatened raptors, specialised videos of a raptor's breeding cycle, rehabilitation centres for wounded raptors, special campaigns for such species as Bonelli's Eagle, reintroduction of the Griffon Vulture in the Cevennes, renting of the Col d'Orgambideska in the Pyrenees. All these activities have had a considerable impact in educating the public in favour of raptor conservation and similar projects are being launched in many other countries of Europe and North Africa.

Michel Terrasse  
Fonds d'Intervention pour les Rapaces,  
B.P. 27, 92250 La Garenne-Colombes, France

## An Intercontinental Educational Project on Migratory Birds

Wim J.M. Verheugt

Action to conserve migratory birds has always been a focal point of the work of the International Council for Bird Preservation since its establishment in 1922. Based on the wealth of experience gained during the last 60 years, ICBP in a joint programme with its sister organisation, the International Waterfowl Research Bureau, launched a coordinated campaign in 1984 to enhance the conservation of migratory birds within the European-African flyway system. Many projects in the Migratory Birds Programme have a strong educational component to promote public awareness. ICBP's latest contribution is the publication of a bird migration wallchart, depicting the routes of birds migrating between Europe and Africa, to be printed initially in ten languages and distributed in 30 countries throughout Africa and Europe, with the full support of the governments concerned. Migrant birds link countries and continents. Their popular appeal and conspicuousness make them an ideal subject for education. Target audiences are secondary school pupils. By turning to children in this campaign, ICBP is investing in a more conservation-conscious future.

Wim J.M. Verheugt, ICBP, 219C Huntingdon Road,  
Cambridge CB3 0DL, England