

A Proposal to Create a Registry of Sites of International Importance to Raptors, especially on Migration

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ABSTRACT

Many species of raptors are widely dispersed during the breeding and wintering seasons, but there are numerous sites around the world at which raptors are concentrated during migration. A registry of internationally significant sites could foster the conservation of raptors by stimulating public interest, research, local economies and fund-raising opportunities. Possible criteria for registering sites of international importance are offered for discussion purposes, and the concept is discussed with reference to two similar systems (Ramsar Convention and the Shorebird Reserve Network) already in place.

INTRODUCTION

Birds that are concentrated in space and time during migration are especially vulnerable to such conservation threats as shooting or losses of critical feeding or resting areas (Myers *et al.* 1986). The presence of large numbers of birds is one measure of an area's ecological importance, and concentrations of waterfowl and shorebird species have been used effectively as a basis for identifying sites deserving international recognition and protection.

Many species of raptors are widely dispersed during the breeding and wintering seasons, but there are numerous sites around the world at which one or more species of raptors are temporarily concentrated during migration. At these sites large numbers of migrating raptors can be observed with considerable predictability. There are also discrete wintering or breeding areas that are exceptional for their diversity or concentration of raptors.

The purpose of this paper is to propose a registry of sites of international importance to raptors, especially in migration. The ultimate aim of the registry would be to foster the conservation of birds of prey and the habitats on which they depend.

Ramsar Convention and Sister Reserves

As background, it will be useful to consider two existing registry-type systems, one of which has been in place for about 15 years.

The Convention on Wetlands of International Importance, especially as Waterfowl Habitat, is known as the Ramsar Convention. It is named after the city in Iran where the Convention was formally adopted in 1971. The International Union for the Conservation of Nature acts as the Secretariat for the Convention; the International Waterfowl Research Bureau provides scientific advice. Each participating national--called a contracting party-- designates one or more wetlands of international importance within their jurisdiction, and each site must meet at least one of several criteria (Ramsar Convention Bureau, undated). The basic criterion is quantitative: does a site

regularly support 10,000 waterfowl or 20,000 waders? There are also general and representative criteria (Table 1).

Table 1. Ramsar Convention Criteria*

1. Quantitative criteria for identifying wetlands
of importance to waterfowl

A wetland should be considered internationally important if it:

- (a) regularly supports either 10,000 ducks, geese and swans; or 10,000 coots; or 20,000 waders; or
- (b) regularly supports one per cent of the individuals in a population of one species or subspecies of waterfowl; or
- (c) regularly supports one per cent of the breeding pairs in a population of one species or subspecies of waterfowl.

2. General criteria for identifying wetlands of importance
to plants or animals

A wetland should be considered internationally important if it:

- (a) supports an appreciable number of a rare, vulnerable or endangered species or subspecies of plant or animal; or
- (b) is of special value for maintaining the genetic and ecological diversity of a region because of the quality and peculiarities of its flora and fauna; or
- (c) is of special value as the habitat of plants or animals at a critical stage of their biological cycles; or
- (d) is of special value for its endemic plant or animal species of communities.

3. Criteria for assessing the value of representative
or unique wetlands

A wetland should be considered internationally important if it is a particularly good example of a specific type of wetland characteristic of its region.

*Source: Ramsar Convention Bureau, undated.

By February 1987, 44 nations had designated more than 300 sites, covering in excess of 20,000,000 ha of wetlands (IUCN Conservation Monitoring Bureau 1986, 1987). Although contracting parties have general obligations regarding their designated wetlands, the primary impetus for conserving Ramsar sites is the public recognition that accompanies designation and participation.

The Western Hemisphere Shorebird Reserve Network (Myers *et al.* 1987) differs from the Ramsar Convention in at least two respects. First, the genesis of the Shorebird Reserves was the recognition that within the Western Hemisphere there is a small number of wetland sites that are directly "linked" by migratory shorebirds that depend year after year on the same series of feeding, resting, staging and wintering areas. Second, Shorebird Reserves do not result from a formal international agreement and participation is not limited to national governments. Land-owning or managing authorities, either private or governmental, may participate. The network of reserves is maintained by a representative council, and there is a technical panel to review proposed sites.

Like the Ramsar Convention, the basic standard for designation is quantitative: a site of hemispheric significance must support at least 250,000 shorebirds or more than 30% of a flyway population. A major function of the system is to encourage communication among reserve-site managers and, like Ramsar, the chief impetus for conservation comes through coordination, recognition and the adverse publicity that would result if one of the designated sites were to be degraded. The Shorebird Reserve Network is new, but many sites of hemispheric significance have been identified, and at least 23 conservation agencies have committed lands within their jurisdictions (Myers *et al.* 1987).

PROPOSED RAPTOR SITE REGISTRY

Given this background, the basic concept of a Registry of Sites of International Importance to Raptors, especially in Migration, is quite simple. We envisage a registry with sites that are designated based on quantitative, general or representative criteria, with emphasis on concentrations of migrants. Provision should be made to include important nesting and wintering areas too (see below).

The nature of the registry and identification of qualified sites should be the work of a committee of raptor biologists and conservationists, convened under the auspices of, and with the professional support of, an appropriate international organisation, such as the International Council for Bird Preservation. The committee should prepare a report and recommendations for consideration within the international raptor conservation community.

Formal participation in the registry should be voluntary and, like the Shorebird Reserves, it should be open to any interested land-owning or managing authority, either private or governmental.

As a preliminary step--before actively attempting to enrol the formal participation of land-owning or managing authorities--we envisage publication of an atlas, cataloguing the candidate sites as identified by the registry committee. The atlas could be part of the committee's report and recommendations. For each site, the atlas should summarise available information in standard categories: e.g., political jurisdictions, land-owning and managing authority, documentation of the migration and identification of local conservation and ornithological contacts and organisations.

Selection Criteria

Definition of site criteria should be the responsibility of a carefully chosen committee with wide international representation. The criteria and examples presented in Table 2 are offered to stimulate discussion and to illustrate the type of areas to be considered (examples used here are from North America only).

These criteria are patterned after those used by the Ramsar Convention, and they can, no doubt, be greatly refined. The difficulty is in establishing criteria that identify those sites that are of truly international significance, because the designation would be meaningless if the criteria were so inclusive that virtually any site would qualify. The Shorebird Reserve Network has handled some of these problems by using a two-tiered system, with sites being designated as either "hemispheric" or "regional" in significance.

Table 2. Possible Registry Criteria

1. Quantitative Criteria

- (a) regular passage, in spring or fall, of 60,000 raptors (Cape May Point, New Jersey); or
- (b) ?* per cent of a species, subspecies or continental population (Santa Ana National Wildlife Refuge, Texas would be an example of a site where a high proportion of a species population – Broad-winged Hawk *Buteo platypterus* – passes);

2. General Criteria

- (a) passage of an appreciable number of rare, vulnerable or endangered species or subspecies (Assateague Island, Maryland/Virginia – passage of Peregrine Falcon, *Falco peregrinus*); or
- (b) discrete wintering or breeding area supporting an appreciable number of rare, vulnerable (e.g., geographically restricted), endangered species or subspecies, or endemic species (Alaska Chilkat Bald Eagle Preserve, Alaska-- wintering concentration of Bald Eagles, *Haliaeetus leucocephalus*).

3. Representative or Unique Criteria

- (a) special value for purposes of public education or scientific research (Hawk Mountain Sanctuary, Pennsylvania); or
- (b) especially good example of a site within, and characteristic of, a recognised, major pathway (Hawk Ridge, Minnesota--Upper Midwest-Great Lakes region); or
- (c) special value because of unusual diversity or density of wintering and breeding raptors (Snake River Birds of Prey Conservation Area, Idaho).

*There is at present insufficient information to define an appropriate percentage.

WHY A REGISTRY FOR RAPTORS?

Why establish a Registry of Sites of International Importance for Raptors, especially in Migration? Would it be worth the effort?

It is hard to tell. We do know that some Ramsar Convention sites have been spared degradation and destruction because of the fact that they were listed under that international agreement (Ramsar Convention Bureau, undated). We also know that participation in Ramsar has stimulated some of the contracting parties to undertake active wetland conservation programmes that benefit more than just the designated sites. The network linking Shorebird Reserves is really too new to evaluate, but participation in that programme was one factor in persuading the State of New Jersey to apply over one million dollars in mitigation money from a utility company toward acquisition of shorebird habitats in Delaware Bay.

We believe that a registry programme has the potential to be of real benefit in aiding raptor conservation. Raptors are extraordinarily attractive and visible, and designation of sites of international significance could be a tool to stimulate public interest and to focus it on some of the habitat requirements of birds of prey. Designation of sites might be of particular help where shooting and persecution remain a problem.

The process of cataloguing sites of importance to raptors will be helpful in identifying gaps in information about raptor distribution. It could stimulate more research on migration and use of migration counts to monitor trends in populations. The atlas we have proposed as a part of this process would, in and of itself, be a tool for the use of researchers, conservationists, government planning officials and bird-tour leaders.

Lastly, drawing attention to significant raptor migration sites could increase visitation by bird watchers and tourists. Increased public traffic could aid local economies and create fund-raising opportunities for bird conservation organisations.

None of these benefits is guaranteed, but if we are to be successful in addressing the problems that threaten raptor populations, creative thought and action are required. We invite comments, suggestions and participation.

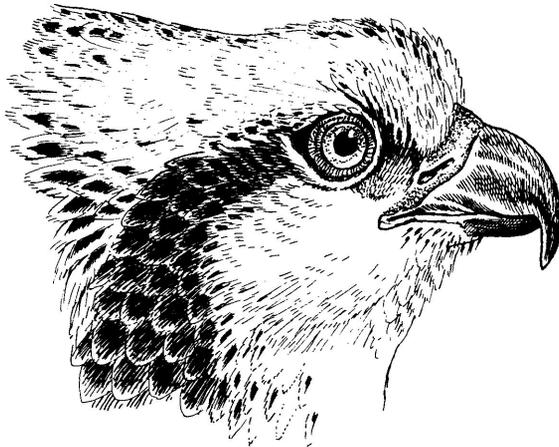
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