

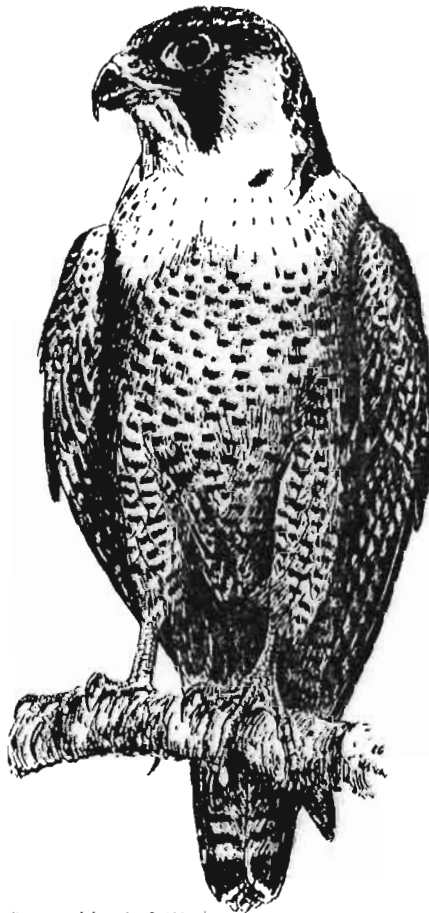
ENDANGERED SPECIES!

CAN WE AFFORD THEM?

In recent months numerous articles have been published that praise the Endangered Species Act. This is no coincidence, but rather a careful orchestration aimed at the current proceedings in Congress on the reauthorization of this law. Most of these articles address only one side of this extremely complex matter, leaving the average reader with a wrong impression based on partial information. And that, of course, is how public opinion is manipulated. A short synopsis of the history of this federal law is in order to understand the points raised here.

HISTORY OF THE ENDANGERED SPECIES ACT

Prior to 1966, when the original Endangered Species Act (ESA) was signed into law by President Johnson, only a few laws affected species on the federal level, such as the Lacey Act of 1900 and the Migratory Bird Treaty Act of 1918. Most such laws affected the states' rights to wildlife management. During the 1960s, when many consequential federal environmental laws came into existence, the principles of protecting specific species were implemented. The original Endangered Species Act of 1966 was the first major action to preserve endangered species on a national level. Several congressional actions followed: The Endangered Species Conservation Act of 1969 added to the species list and broadened federal involvement in wildlife protection. The main impact was not domestic, but international. The Endangered Species Act of 1973 was the



Peregrine falcon by F. Weick

The Alaska construction industry pays \$25 million yearly for the peregrine falcon program.

most consequential of all. Coupled with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which made the United States a signatory partner of this international agreement in 1973, it provides comprehensive protection to all endangered and threatened plants and animals.

Subsequently there were amendments

which had more specific consequences:

- The amendments of 1978 added consideration of critical habitat to the Act.

- The amendments of 1979 directed the federal government to ensure that its actions are not likely to jeopardize the existence of any species.

- The amendments of 1982 eliminated all economic considerations from the species listing process.

- The amendments of 1988 created a mechanism to monitor species which were candidates for listing.

The listing was updated in 1991, adding still more species and habitats to the list of protected areas. In addition to these legislative actions, a multitude of court cases mandated directives and regulations. The most consequential and noteworthy was the *Hill* decision by the U.S. Supreme Court in 1978, which shut down the Tellico Dam project in Tennessee because of the endangered snail darter fish. Basically it states that cost and economic consequences are of no concern when the welfare of endangered species is at risk. The court made it clear that conservation is not to be sacrificed for any other cause, and viewed the value of endangered species as "incalculable."

There are many examples of extreme costs associated with the effects of the ESA after the snail darter case. The question of ecology vs. economy was most highly publicized in the case of the spotted owl in the Pacific Northwest. This issue, which came to light in 1988, is one that virtually all Americans have heard of by now.

There is no question that the ESA and its amendments have had great political implications and have cost American tax-

payers, businesses, and individuals billions of dollars in implementation and enforcement. These costs are rarely discussed in the media, so let me tell you a bit about what it costs to Alaska.

ENDANGERED SPECIES IN ALASKA

Compared with other areas, Alaska has only a few species listed as "endangered" or "threatened," and thus few species have cost the state money for ESA compliance. Some of these species live in remote areas with little human contact, like the short-tailed albatross, which breeds on a remote island off Japan and visits Alaskan waters in the North Pacific; and the Aleutian Canada goose (which is not a separate species, but rather a geographic form of the abundant Canada goose), which breeds on some of the remote Aleutian islands. Another species, the Eskimo curlew, was last seen in Alaska more than 100 years ago and is nearly extinct, with only a few remaining in Canada.

Recently the spectacled eider has been added. It has distribution along the western and northern coasts. The effects of its listing are not yet clear. The only plant protected, the shield fern, is limited to a few spots in the Aleutians.

The bald eagle is protected both by the ESA and the Bald Eagle Protection Act of 1940, amended in 1959. Since 1962, it also has been protected by the Migratory Bird Act. Three separate American laws, plus CITES, protect this species. It is our national emblem and most Americans are very supportive of its special status. There is no doubt that protection of this species has had an economic impact. Because its distribution is limited, however, only a few activities in a few isolated areas have been affected, primarily logging and mining.

The best-known case is the peregrine falcon, which lives throughout Alaska and is represented by three subspecies: *Falco Peregrinus Pealei* in the Aleutians, *Falco Peregrinus Tundrius* in the tundra areas of western and northern Alaska, and *Falco Peregrinus Anatum* in the interior and rest of Alaska. The peregrine falcon and its various forms have a worldwide distribution. This species showed an alarming decline in the late 1950s and 1960s. It was ultimately discovered that the widespread use of pesticides, especially DDT, poisoned the prey birds and in turn affected the

falcons' ability to reproduce. The decline was steep and dramatic. In the late '60s and early '70s, the use of these chemicals was banned in most industrial nations. The results were positive and breeding populations recovered quite well, in many cases to original levels. Many authors give credit for this recovery to the effects of the ESA. Most bird-of-prey specialists, however, cite the control of pesticides as the reason.



Author Henry Springer is executive director of the AGC of Alaska.

SPECIES PROTECTION IS MISSING WHERE IT'S MOST NEEDED: THE THIRD WORLD

Peregrines are migratory birds. Some Alaskan peregrines winter in South America. A food supply uncontaminated by pesticides is just as important in the winter as it is during the summer breeding season. To compound the problem, many of the Alaskan prey birds also winter in tropical countries and may be exposed to poisoning. Significantly, some seed-eating prey birds may absorb quantities of pesticides and store them, in concentrated form, in their fat deposits. As a result, peregrines could be ingesting the poison in a concentrated dosage. This points to one of the great dilemmas in the whole question of protecting endangered species.

The greatest needs for protection and action are not in North America, but in

most of the Third World. The number of species increases significantly toward the temperate and tropical areas. Another factor that complicates effective measures: most species in northern and southern climates have a wide distribution, while species in the tropics have very limited distribution and often occupy tiny niches. This makes them extremely vulnerable to any change in their habitat. It is, however, exactly these areas that are economically poor. The precious local resources are used and misused at an alarming rate. Effective protection cannot be enacted without a global approach. This takes money. Much is spent in the United States and abroad—but not where it is needed the most.

ALASKA CONSTRUCTION INDUSTRY PAYS \$25 MILLION YEARLY FOR THE PEREGRINE FALCON PROGRAM

Even discounting the actual federal and state money spent to enforce the ESA, the costs associated with the peregrine falcon are staggering. Exact figures are difficult to compile because cost accounting is not done for individual species. A few examples, however, will illustrate the implications:

In the taiga (scattered tree growth) areas of Alaska—about three-fifths of the state—peregrines nest primarily on rock outcrops found along the river systems. They also use riparian (river bank) areas for their social activities and hunting. Riparian habitats produce the highest percentage of biomass for prey animals, nearly all of them birds. Alaska's Department of Highways lost most of its sources of gravel and other material because the environmental impact statements showed a conflict with provisions of the ESA. The average yearly construction expenditure for heavy construction for both public and private works is in excess of \$600 million. About 40 percent is used in areas influenced by the presence of peregrine falcons. Considering that the increased cost of procuring material from alternate and upland sources amounts to about 5 percent of the contract work, the cost to the construction industry to comply with the provisions of the ESA for this species alone amounts to about \$12 million per year.

In addition, preconstruction costs associated with public hearings, research and the preparation of environmental im-

(continued)

fact statements have risen steadily and can be estimated at 1 to 3 percent of total project costs, depending on the type and size of the project. The total preconstruction cost per year in Alaska is in excess of \$100 million, adding another \$2 million to the associated cost. The various operating budgets contain funding for research, management and enforcement of such agencies as the U.S. Fish and Wildlife Service, Bureau of Land Management, Alaska Department of Fish and Game and the University of Alaska. These will add another half-million dollars.

During the construction of the Alyeska pipeline, expenditure of more than \$10 million could be directly attributed to the problems associated with peregrine falcons, including realignment of roads and of the pipeline, plan changes, restriction of activities in some areas and prohibition to operate within certain time frames in others, especially during the critical summer months.

These restrictions continue, because the law demands it.

Government officials and bureaucrats are often blamed for these restrictions. That is not fair! Granted, in some cases they make one-sided decisions, but it is clear that Congress did not provide any mechanism by which to consider cost factors. Congress made it clear that it is not the species alone that is to be protected, but any factor contributing to its welfare as well. This includes numerous human influences and habitat alterations.

But back to the Alaska peregrines. Disregarding the demands of the ESA and disregarding cost as a factor, what would have happened to this species without the ESA? Of course it is speculative, but there is no doubt about the following facts:

1. The peregrine population declined because of the use of pesticides and in some populations because of mercury. It recovered when use of these chemicals was prohibited.

2. There are many remote areas in Alaska with suitable habitat that is little influenced by human activity. About two-thirds to three-quarters of Alaska's breeding population is included.

3. Many other species compete with peregrines for suitable nesting sites. These include gyrfalcons, rough-legged hawks, golden eagles and ravens. The peregrine, as a migratory bird, arrives late, and very often the best sites are already occupied by these species. The

non-migratory birds arrive earlier, are larger and more aggressive, and usually prevail. In some areas, especially around rural settlements, ravens have increased dramatically, and they definitely affect the breeding efforts of peregrines. Peregrines are pushed to secondary, less favorable sites and I believe this has a more negative impact on the breeding success than most human activities.

I believe the peregrine population in Alaska would be at about the present level even without the ESA. Granted, some birds along the traveled river and road systems would be affected, but they are affected now to the same degree.

THE \$35,000 BIRDS

We as humans have an obligation to address conservation in a prudent manner, and I believe that we have to use financial resources to do this. However, I also feel that the expenditures related to the ESA in Alaska are excessive and that the money could be put to better use. None of Alaska's species is in serious trouble and all are afforded sufficient protection under other state and federal laws. Of the 500 to 600 pairs of peregrines in Alaska, perhaps 200 may be directly affected to some degree by human activity. That results in a cost of about \$35,000 per bird per year. During the Middle Ages, when the peregrine falcon was a favored hunting bird of nobility, good birds were worth their weight in gold. In today's market that would amount to \$15,000 per bird. The price has gone up! Oil companies and other large corporations do not worry much about the cost as a factor, because they recover all expenses through tariffs and sales of their products. Most people do not realize the effects and the resulting cost to everyone. But the bottom line is that *everyone* pays.

CRITICAL POINTS FOR REAUTHORIZATION OF THE ENDANGERED SPECIES ACT

The Endangered Species Act is up for re-authorization before Congress. The stakes are high. The political differences between the executive and legislative branches of the federal government, and the composition of Congress make the outcome uncertain. However, changes are probable. It is to be hoped that a reasonable balance can be achieved and cooler heads prevail. I believe that the following factors should be addressed:

1. Economic factors must play a role

in the listing and decision-making process.

2. The scientific problem of legally defining what constitutes a "species" must be clearly addressed. This is one of the major flaws in the ESA's present form. The inclusion of "bio-diversity" since the Rio Summit makes it even more pressing. There have been about 1 million species identified, of which about 75 percent are insects. Very little is known about most of them. Congress needs to set some limits on how far down the list we can reasonably go.

3. Congress must consider the problem of "local" distribution within the United States versus total distribution beyond our boundaries. Some species are rare in the United States, but common elsewhere. It does not make sense to spend a disproportionate amount of money when it is urgently needed for more critical cases.

4. Congress must address the question of compensation for reduced value of private property and the social effects and consequences.

5. Our role in global affairs needs to be clearly defined. Some of our present forms of "eco-imperialism" are uncalled for and in many cases work against serious conservation efforts by other countries. Examples include efforts to save elephants, argali sheep and many other African and Asian species.

BACK TO THE ORIGINAL QUESTION: ENDANGERED SPECIES—CAN WE AFFORD THEM?

This is a decision we must make, first as individuals and then as a nation. But you cannot make a rational decision until you have all the facts before you. It is unfortunate that various groups on both sides of the issue polarize it according to their own philosophies. One-sided articles appear in the press. This article may seem one-sided, but it covers factors rarely mentioned.

The Endangered Species Act has many merits, but in its present form it is not affordable—not by us and certainly not by the nations who need it most: those of the Third World. We *must* think globally when it comes to preservation efforts, ecology and affordability.

Congress needs to hear from all of us. It's up to you.

—By Henry Springer, executive director, AGC of Alaska. Reprinted from *The Alaska Contractor*, Fall 1995.