

WILDLIFE PRESERVES

Zachary M Smith

Preserving Wildlife



Clockwise from top left

Arctic Wildlife Refuge,
NE Alaska
(arctic.fws.gov)

Cloud Forest Reserve,
Monteverde, Costa Rica
(monteverdeinfo.com)

Loango Nat'l Park, Gabon
(atlas.geo.cornell.edu)



Wildlife preserves can be found in every country, every environment and every ecosystem. Preserves retain as much of a primeval character as possible, acting as sanctuaries for flora & fauna and the natural processes unique to many of these often very special areas. Preserves are protected from development in an attempt to preserve their character. Unfortunately, bureaucrats and pseudo-conservationists sometimes have ulterior ideas of a preserve's purpose.

Broadly speaking, wildlife preserves are areas of importance for wildlife, flora and fauna, or features of geological or other special interest, which are reserved and managed for conservation and to provide special opportunities for study and research. In turn, we can gain a better understanding of how these special places function and what we can do to protect them. Furthermore, it allows us to examine how such preservation and management can be extended far beyond designated boundaries and into our cities, towns, and neighborhoods creating a much greater and complete ecosystem vitality.

As development continues to consume available land, it is very important that wildlife preserves don't simply act as tourist attractions, but rather they become important tools that help us incorporate habitat preservation into the ever-encroaching development.

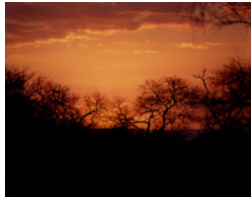
Official reserves may be designated by government institutions, private land owners, charities, research institutions, or preservation organizations. However, reserves can also be created in one's own backyard!

The moral of the story: Wildlife preserves aid in informing us what's important to protect. Preservation should extend far beyond their boundaries and be a major consideration in all phases of planning and development.

"Conservation begins with saving real places - the forests and deserts, rivers and wetlands, mangroves and coral reefs that make up the web of life."

- World Wildlife Foundation

"In wilderness lies the preservation of the world." - Thoreau



Context:

Wildlife preserves can be far ranging in type, scale, purpose, and location. Generally speaking, they should include key habitat areas in various ecosystems, environmental resource areas, habitat for threatened/endangered species, migration corridors, rare landscape elements, areas of cultural significance, water-related ecosystems, etc.

In addition, wildlife needs habitat for breeding, shelter, food, migration, and any other facet of living. Preserved areas are vital for flora and fauna, for health of natural systems and processes, opportunities for education and research, and are beneficial to biodiversity. The ability to preserve various important ecosystems and landscapes improves the health of the larger Mother Earth in many ways, lessening impacts of CO₂ induced global warming, improving water system health, habitat diversity, etc.

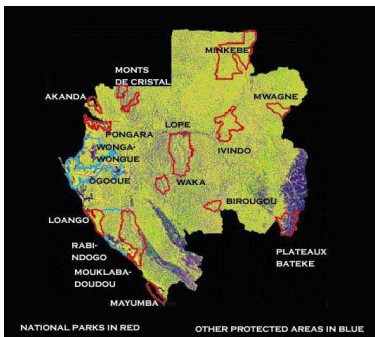
Urbanization, sprawl, development (4 million acres of land lost to development ea. year!), agriculture, climate shift, pollution, industry and politics have all led to a decline in available open space.

Decrease in quantity and quality: Fragmentation of wildlife patches lessens value of habitat, disrupts corridors, hinders biodiversity persistence/stability, and hurts ecosystem vitality.

Rule of Thumb: Important to include habitat protection as part of the planning process and thoroughly identify and evaluate important ecosystems and natural resources.

Goal: Ideally, Refuge Areas become "hubs" that promote conservation strategies extending far beyond their boundaries, into other habitat areas incorporated into planning and development from private, corporate, state, and federal land owners.

Presence of protected ecosystems enhances quality of life for all.



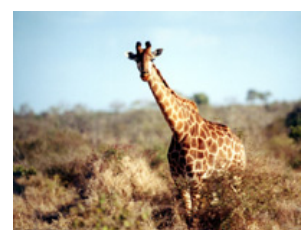
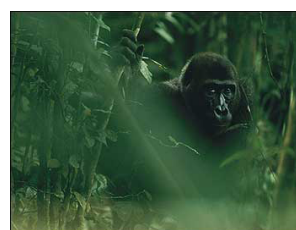
Case: Gabon

The government of Gabon has recently made a welcomed move to protect its diverse and rich landscape. Gabon created a system of 13 National Parks and several protected areas on 10% of its total land. (over 10,000 sq miles) Logging and industrial development will be completely banned within these areas.

The parks range from white sand coastline beaches, with roaming hippos, to unparalleled forested jungles, with gorillas and chimpanzees, to savannah grasslands where giraffes tower over the horizon.

Gabon's newly adopted preservation strategy aims at appropriate long term protection for the various unique ecosystems and species. As a result, preservation of the forests helps lessen the strain on global warming and is certainly a step forward in protecting the landscape of Gabon from serious ecological destruction. A move that will ultimately aid in sustainable practices in the Central African country.

The creation of these National Reserves is a huge victory towards protecting Gabon's extraordinary biological wealth and serves as an excellent precedent for other countries to follow. Gabon has put a premium on creating a viable alternative to exploitation of natural resources.



wildlife photos: Michael Fay, National Geographic

Essential Elements:

As previously mentioned, it is inherently important to include habitat protection as part of the planning process and thoroughly identify and evaluate important ecosystems and natural resources. Knowledge of regional habitat and ecology significantly aids in the ability conservation on all scales to become far more effective.

It is difficult to put rules on preservation, it seems somewhat instinctive that more is better. However, the Planning Advisory Service has prepared a list of Biological Principles to aid in its inclusion:

1.) MAINTAIN LARGE, INTACT PATCHES OF NATIVE VEGETATION BY PREVENTING FRAGMENTATION OF PATCHES THROUGH DEVELOPMENT.

- size of patches greatly influences wildlife population size and persistence

2.) ESTABLISH PRIORITIES FOR SPECIES PROTECTION AND PROTECT HABITATS THAT PROMOTE THE DISTRIBUTION AND ABUNDANCE OF SPECIES.

3.) PROTECT RARE LANDSCAPE ELEMENTS

- steer development away from rare and/or sensitive areas

4.) MAINTAIN CONNECTIONS AMONG WILDLIFE HABITATS BY IDENTIFYING AND PROTECTING CORRIDORS FOR MOVEMENT.

- aids in migration, safer movement, hinders isolation and inbreeding

5.) MAINTAIN SIGNIFICANT ECOLOGICAL PROCESSES SUCH AS FIRE OR FLOODS IN PROTECTED AREAS

6.) CONTRIBUTE TO REGIONAL PERSISTENCE OF RARE SPECIES BY PROTECTING HABITAT LOCALLY.

7.) BALANCE OPPORTUNITY FOR PUBLIC RECREATION WILD HABITAT NEEDS OF WILDLIFE

In addition, it would be beneficial to incorporate natural community and biodiversity planning early in the planning process, at all levels. State agencies should create minimum standards and provide technical assistance to prospective preservation plans. Endangered Species Act and more stringent state/city laws should act, at the least, as safety nets for species protection. Also, landowner's should prepare Habitat Conservation Plans to apply to their lands and update them accordingly.

It also important to be aware of threats to preserved areas in order to make them as functionally healthy as possible.

-Invasive species -pollution, especially water related -sprawl and fragmentation -lack of information and/or knowledge needed to make sound management decisions
 -inadequate staffing and facilities -uninformed or destructive public -underfunding
 All can have potentially very negative effects on the vigor of preserved areas, therefore, it is important to be informed in order to act and combat potential problems.



-Seattle PI



"Unless someone like you cares a whole lot, nothing is going to get better. It's not."

- Dr. Seuss, The Lorax

"What is man without the beasts? If all the beasts were gone, men would die from a great loneliness of spirit. For whatever happens to the beasts, soon happens to man. All things are connected." - Chief Seattle



Case: Cloud Forest Reserve, Monteverde, Costa Rica

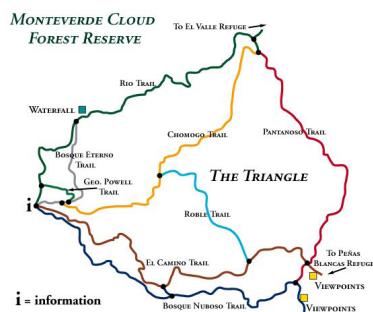
Costa Rica is world renowned for its extraordinary biodiversity. In fact, more biodiversity can be found in Costa Rica than anywhere else. As a result, Costa Rica has become one of the frontrunners in preservation and restoration.

A cloud forest is not your normal rain forest. It is aptly named so because the tree canopy is actually above the clouds. The Monteverde Cloud Forest Reserve is a testament to Costa Rica's rich biodiversity. Over 10,500 hectares of lush jungle, deep gorges, and crystal clear rivers and waterfalls. The reserve is home to over 100 different mammals, 400 species of birds (30 hummingbird species), tens of thousands of insect species, and over 2,500 plant species including 420 orchids! The Reserve is considered one of the most outstanding worldwide.

The Reserve is run by the Tropical Science Center, a non-profit organization. Costa Rica's ability to actively engage in protecting its pristine ecosystems speaks volumes of their conservation efforts.

Cloud Forests absorb CO₂, but at the same time are threatened by global warming and climate shift. They serve as a crucial social educational tool to educate people why they need to be protected. In addition, bioprospecting, the search for new cures, is a major undertaking in the Reserve.

Costa Rica is very active in land conservation, reforestation, identifying biological corridors, advancing research and implementing their reserves as important educational tools. Clearly, they are one of the world leaders in conservation and are great examples to look to.



-Maps and photos from
Monteverdeinfo.com

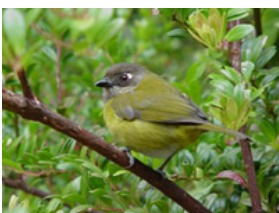
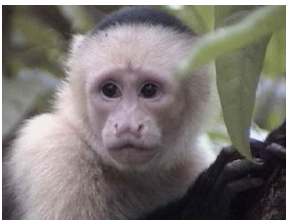


Acquisition/Implementation:

Reserves may be designated by government institutions, private land owners, charities, research institutions, or preservation organizations. It's also important to note that because an area may not be "officially" deemed a Wildlife Preserve, it can still function as a preservation of a valuable process, system, landscape, or habitat.

Recently, the United States has aided several countries, Gabon included, in creating reserves and national parks. The U.S. has also been known to trade debt for land, and set aside the acquisitions as land preserves. However, some skeptics question their intentions. In the US, many government agencies have a hand in dealing with land acquisition and designation, too many to list in fact.

Better yet, there is well many more non-profit organizations that dedicate their efforts towards conservation. Including the World Wildlife Foundation, the Nature Conservancy, WildAid, Greenpeace, the Sierra Club and many, many more.



Case Study: National Refuge System, United States.

Arctic Wildlife Refuge

ANWR. A wildlife refuge located in NE Alaska heavily disputed because of recent attempts to open the refuge to oil drilling enterprises. Provides a perfect example of how politics and monetary gain can play enormous roles in preservation. Hopefully, with a new office, we will see efforts placed elsewhere...

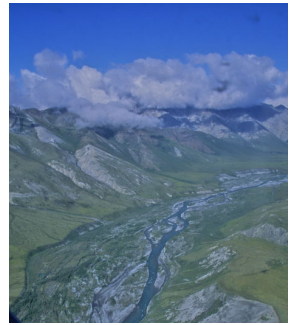
The National Wildlife Refuge:

- 540 areas of wildlife habitat, 3,000 waterfowl areas equalling over 95 million acres in all 50 states and Territories
 - In addition to 75 "Wilderness" Areas another 21 million acres in 25 states
- Refuge System safeguards areas from development and ensures conservation of ecosystems across entire spectrum, both common and rare, to protect species and habitat.

The NWRA aims: To protect, enhance, and expand the National Wildlife Refuge System, lands set aside by the American people to protect our country's diverse wildlife heritage.

In Washington:

Aside from the stunning National Parks, Washington groups protected areas into two categories: Natural Area Preserves and Natural Conservation Areas. Preserve Areas presently includes approximately 30,900 acres in forty-nine sites while Conservation Areas include twenty-eight sites totalling approximately 86,550 acres. Sites are far ranging in size, type and reason for preservation. Typically, other than state land, they are acquired through gift or purchase and are managed by Washington Natural Heritage Program and the DNR. For more info/maps: <http://www.dnr.wa.gov/base/programs.html>



"It is horrifying that we have to fight our own government to save the environment."
- Ansel Adams

"Without habitat, there is no wildlife. It's that simple."
- Wildlife Habitat Canada

"What we are doing to the forests of the world is but a mirror reflection of what we are doing to ourselves and to one another."
- Gandhi

Lesson of Importance:

In today's ever changing world, preservation of land and habitat becomes more and more important. Continued growth and developed knowledge of important natural resources and ecosystems becomes crucial in understanding the best ways to protect, preserve, and conserve habitat for the life and natural processes which depend on them. It is increasingly imperative that habitat protection becomes a major part in the planning process on all scales and all levels.

Existing wildlife preserves should act as hubs, in which they would inform and set precedent as to what should be protected and how it should be accomplished. More importantly, preservation should extend far beyond the reserves and into urban, suburban, and rural development with the reserves acting as central nuclei, facilitating a more complete habitat health, connectivity, and functionality. It cannot simply happen on its own. It will take the care, dedication, and ingenuity of people who want to make a difference. Strive for something better.



Resources:

www.worldwildlife.org

www.nationalgeographic.com

www.greenpeace.org

www.wcs.org

www.nrcs.usda.gov/

www.nature.org/

<http://www.refugenet.org/>

<http://www.dnr.wa.gov/>

www.nwf.org/

www.awf.org/

www.wwfcanada.org/

www.wildaid.org/

www.sierraclub.org

www.epa.gov

<http://arctic.fws.gov/>

<http://www.monteverdeinfo.com/>

<http://www.cloudforestalive.org/>

<http://www.npr.org/programs/atc/features/2002/sept/gabon/> (Gabon)

<http://www.gabonnationalparks.com/>

“The Importance of Planning for Wildlife Habitat Protection,” Ralph Willmer,
2000 AICP

“Precious Heritage: The Status of Biodiversity in the United States”
Edited by Bruce A. Stein, Lynn S. Kutner, and Jonathan S. Adams
Oxford University Press. Published March 200