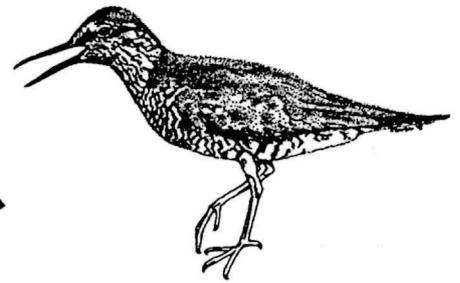


THE TATTLER



The Science Newsletter for
Denali National Park and Preserve

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EDITOR'S NOTE: This special issue of "The Tattler" presents the personal opinions of a variety of persons to a provocative question. Since Denali National Park and Preserve is an internationally acclaimed Biosphere Reserve, and heralded as one of the "gems" of the U.S. National Park Service, it seemed of value to try to understand what about Denali is unique, and worth preserving, not only for this summer's tourists, professional photographers and researchers, but for all human-kind, throughout the world, present and future. Following are the responses of persons from a variety of disciplines and backgrounds. They are presented unedited, and hopefully will stimulate thought, discussion and perhaps an article from you that we might include in a future issue. Regardless of your publication aspirations, we would appreciate your opinion on "What is Denali's unique contribution to the world?"

In many areas, and for many people, wilderness is seen as a luxury for a small elite group of people. At Denali, a managed road corridor that travels "through wilderness" makes wilderness accessible to a large number and wide range of people, including the handicapped and elderly, providing an opportunity to educate and gain support for wildlands and wilderness values. The opportunity to see the spectacular wildlife of the region along the road corridor charges the experience in a way that leads to appreciation, concern and, hopefully, action in behalf of wilderness and wildlife. In order to protect these values, we learn about the impacts of our numbers and limits to growth...something we need to think about for the entire planet as well.

Mike Cobbold
ARA Health & Safety Officer
Exec. Director Denali Foundation

There aren't too many places in the world where one can walk along a high mountain ridge or cross a seemingly deserted gravel bar and see grizzly bears

and wolves chasing caribou, golden eagles and gyrfalcons dogfighting overhead, and scores of wildflowers blooming along snowfields. Denali offers scientists and visitors alike the opportunity to study organisms and ecological relationships in a relatively undisturbed northern ecosystem. It is one of the only places in the world where visitors are actually witness to naturally occurring predation. With many changes occurring in northern latitudes, research conducted within Denali can provide the adequate ecological information base needed for proper management decisions in areas designated for resource development in the north. Perhaps even more importantly, results of research conducted in Denali, which is designated as an International Biosphere Reserve by UNESCO, can provide information that is necessary to conserve the diversity and integrity of natural ecosystems throughout the world. I guess that diversity and integrity are two terms that best describes Denali to me. The diversity of habitats and the organisms occurring within them and the diverse importance of Denali both for scientific studies and for enjoyment by visitors. And to our challenge of maintaining the natural integrity of the area through scientific research and public education.

Carol L. McIntyre
Raptor Biologist
National Park Service

When I think of Denali, two words come to mind - fascination and awe. The 'fascination' comes from my work with a gravel bar willow that I studied on the Toklat and Teklanika river systems for a dozen years. This little plant, growing only 5" tall, lives on Denali's wide gravel bar expanses where very few other species survive. As I examined this species from a variety of angles - growth, reproduction, structure, pollination, etc. - I was amazed at it's adaptations to it's harsh and continually changing environment. The "awe" is Denali, the mountain itself. Each summer, returning after the winter

season, I would want to take a shuttle bus to see the mountain. The first ride was often not successful - the weather doesn't do special favors for botanists! But, eventually I would see it, and I always felt the same sensation - a shiver of awe and wonder. Actually, as I write this, I feel it again. The immensity and beauty that I can physically, in addition to mentally, remember.

Dr. Dotty Douglas
Botanist
Boise State University

Denali's predator-prey systems present a unique opportunity for ecologists to understand predator-prey interactions in naturally regulated, sub-arctic ecosystems. Denali is one of the very few places in the world where an intact complex of predators (wolves and brown bears) and their ungulate prey (moose, caribou, sheep) exist with a minimum of human influences on them or their habitat. Research on this complex has clarified some aspects of long-term population dynamics of predators and prey and defined the interrelationships between them. This has contributed to both theoretical understanding and applied management in systems outside the Park where ungulates and their predators are managed for consumptive uses by humans. Research in the latter environments has been valuable but insufficient by itself to fully explain predator-prey dynamics. Many ecologists agree that in order to understand the exploited systems we must first study the naturally regulated ones. Denali provides a rare opportunity to do this.

Vic Van Ballenberghe
Research Wildlife Biologist
U.S. Forest Service

Denali is unique in that it offers a real wilderness with incredibly easy access. This is a contradiction made possible by the fact that access is controlled and, for the most part, limited to busses. Over the course of a summer thousands of people can experience wilderness without, by their very presence, destroying it.

Gary Koy
Kennels Manager
National Park Service, Denali

Denali National Park and Preserve (Denali) is special to me as a wolf researcher because it is the only extensive wilderness in the world where the wolf-

prey system is protected from any significant human influence on its population dynamics. As such, Denali is an ideal natural laboratory for studies of wolf interactions with their prey.

L. David Mech
Research Wildlife Biologist
U.S. Fish and Wildlife Service

I have spent part of almost all of the past 34 years in what is now Denali National Park and Preserve, principally in connection with my own research or that of students from the University of Alaska Fairbanks. The Park has become very special to me in several contexts. Denali still has a reasonably intact system of large predators and their prey and all that this implies. The particular combination of physiography and extensive areas of short vegetation typical of much of the central Alaska Range in juxtaposition with the road is rare. An observer has the opportunity to see a high proportion of what is going on, especially in terms of large mammal activity, over a great deal of excellent bear habitat. This has afforded reasonable "yield" from observational research and has allowed detailed, short-range observation of bears living relatively natural lives. Such a fine-grained approach to behavior and habitat fills important gaps in more common coarse designs. Denali offers an unusual opportunity for assessing changes in vegetation in the mountains of Alaska's Interior; we need to focus some real effort on this before substantial potential is lost. Denali's specialness has been recognized in biosphere reserve status for sometime; yet our real knowledge of what, how much, and "how it works" is limited to a tiny fraction of the organisms and systems that make up the U.S.'s best tundra-taiga interface park. The opportunity for real contributions to our understanding of the systems represented at Denali in the biosphere reserve context is too great to let slip, both for the long-term well being of the park and Man's general ability to survive on Earth. Beyond the research context, Denali still means wild land and the potential for many types of enrichment. Significant wildness has been lost in the eastern end, but there is room for "personal wild" even there. Hopefully, the extensive roadless country in the west end will remain that way, providing direct and indirect true wilderness for decades to come.

Fred Dean
Professor of Wildlife
University of Alaska, Fairbanks

Denali National Park offers to the mycologist, one who works with fungi, a fantastic array of field-laboratory environments extending from riparian and river bottom, through meadow, plateau, to low and high altitude alpine to Arctic alpine, all in interior Alaska settings. All major groups of fungi are represented and their investigation presents limitless material, most of which is either new to DNP&P, the state of Alaska, or to science. Through rigid protection, only the road corridor exhibits disturbances necessary for the fruiting of fungi. All other sites are positive and quite natural; thus permitting the assessments of meaningful fungal biodiversities. Park personnel and research support staff offer valuable support and logical cost savings to those dedicated to their mission, one of gleaning new information that adds significantly to a needed inventory and data base as well as digesting the science learned for population consumption by thousands of visitors making a trek to the Park annually.

Gary Laursen
Mycologist
University of Alaska, Fairbanks

The wilderness area of Denali National Park has received 75 years of protection from most of man's disruptive activities. As such, it is a prime research resource, providing a unique opportunity for study and comparison with less protected sub-arctic areas. The plant and animal populations residing in this wilderness area have been relatively undisturbed by human activities. There are few, if any sub-arctic areas of this magnitude that have such a lengthy history of protection. The human influences exerted upon the area in the form of mining activity, road and cabin construction, wolf control, and recreational uses have been limited and isolated in most instances. Continued vigilance is required to prevent cumulative impacts even from the non-consumptive uses still occurring. This wilderness deserves continued, rigid protection in order not to compromise any further the pristine state of its resources. Commercialism, guided backcountry tours, and trail development all will serve to erode the Park's wilderness character. Pre-ANILCA protection for the old Park wilderness should be reinstated.

This area is the only extensive area I know of in the state where snowmachines are prohibited and the landscape remains free of their noise and looping

trails. Dog sled transportation without snowmachine support remains the primary mode of travel just as it was in historic and prehistoric times.

The Class I air quality of the Park is an increasingly rare and precious commodity which appears to be threatened by pollutant sources both neighboring and far removed from the local environment. Once beyond the headquarters area, the Park's winter sky is unsullied by intrusions of mercury vapor lights, permitting fantastic viewing of stars and the aurora.

The Park has been the bellwether of Alaskan Park management. It receives the majority of visitation because it has incredibly easy access and provides outstanding wildlife viewing opportunities. Its restrictions on private vehicles and provision for a visitor transportation system demonstrated some brilliant preplanning. The challenge for future managers is not to let the system become eroded. Denali is a showcase and as such is under the closest scrutiny by its Alaskan congressmen and visiting public.

Denali represents much of what has been happening throughout the state of Alaska and elsewhere. Its remoteness has been surmounted and developers are beating on the doorway. We have an opportunity to protect a nearly perfect ecosystem from further degradation, or to permit the corrosion of the protective systems to escalate.

Sandy Kogl
Park Ranger
National Park Service, Denali

What does Denali have to offer...?

Being the Regional Charismatic Mega-Biologist, I am sure what I have to say will be of no surprise to anyone. I thought long and hard about the values of Denali hoping that I could surprise you with some uncharacteristic response, but no matter how hard I tried, I kept coming back to the large mammal community in this park and the values it has to the visitors and to science.

Denali is the only place in the world that I know of where people have a good opportunity to observe the predatory interactions of bears and wolves with their prey. And, it all takes place in a spectacular setting

to boot! Such interactions certainly occur throughout much of the circumpolar north but Denali is the only place that these animals are not overly shy of people, their behaviors have not been altered by human actions, the access is easy for the average person, and their aren't too many trees in the way. Seeing predation in action is a powerful lesson about the workings of the natural world. Visitors lucky enough to see wolves killing a caribou bull along the park road, or a bear killing a moose calf, may not consider themselves fortunate, but they will definitely leave here with a new appreciation of life in the wild for these animals.

Not only is Denali a great place to observe wildlife and the interactions that guide their existence, but it also has incredible research values for many of the same reasons. The large mammal community in Denali is the only one of its kind in the world that is minimally influenced by human harvest. We have the opportunity to understand the population dynamics of these species and their interactions in this naturally regulated system, and we are taking advantage of that opportunity. What we learn about these species, as well as similar species in other predator/prey systems, has major implications for their conservation and management throughout their range. We have the global responsibility to provide the standard against which impacts of humans and our management actions elsewhere can be judged.

Layne Adams
Research Wildlife Biologist
National Park Service

Editor's comment: See all this blank space? The request for contributions to this special issue was distributed to every division in the park, about half of the researchers that work in the park (including all areas of expertise), and to the park concessioner. Our hope was to obtain a wide diversity of perspectives, and then search for common threads. What you see is what we got! There was an obvious bias of wildlife professionals responding to our request, so we'll hold off on searching for common threads until we hear from you.