

At nearly 20 million acres almost the size of South Carolinathe Arctic National Wildlife Refuge is one of the largest intact ecosystems in the world, home to a vast array of wildlife, including 45 mammals and more than 200 migratory and resident bird species. It boasts the greatest biodiversity of any protected area north of the Arctic Circle. But it is the 1.5-million-acre coastal plain that gently descends from the Brooks Range mountains to the Arctic Ocean that is the refuge's biological

heart. Not only is the coastal plain the Porcupine caribou herd's traditional core calving area, it is the country's most important onshore denning habitat for polar bears and home to grizzly bears, arctic foxes, wolverines, muskoxen, wolves, voles, loons, ducks, shorebirds, snowy owls, arctic graylings and more. At least 125 species of birds migrate here from every continent but Australia and from all 50 states to nest, rear their young and feed.

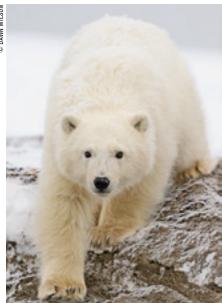
The U.S. Fish and Wildlife Service

(FWS) manages the refuge, including the coastal plain's expansive tundra wetlands, low rolling hills, innumerable lakes and ponds, north-flowing rivers, coastal marshes and river deltas. But periodically this largely pristine wildlife haven is embroiled in a fierce political fight, pitting those who wish to preserve this Arctic wildlands and its inhabitants against those who want to develop the land for oil and gas production.

More than a decade has passed since the last big push for drilling,







Caribou (far left) migrate to calving ground on the coastal plain, where an aerial shot (previous spread) reveals them as specs spreading across the landscape. The coastal plain is also important to the polar bear (left) and the arctic fox (above).

and in 2015—following FWS's comprehensive assessment and recommendation—President Barack Obama called on Congress to officially designate the coastal plain and more than 10 million additional acres of the refuge as wilderness. This would have sealed off the area from oil development with the highest degree of federal land protection available. Predictably, it went nowhere in the anti-conservation Congress.

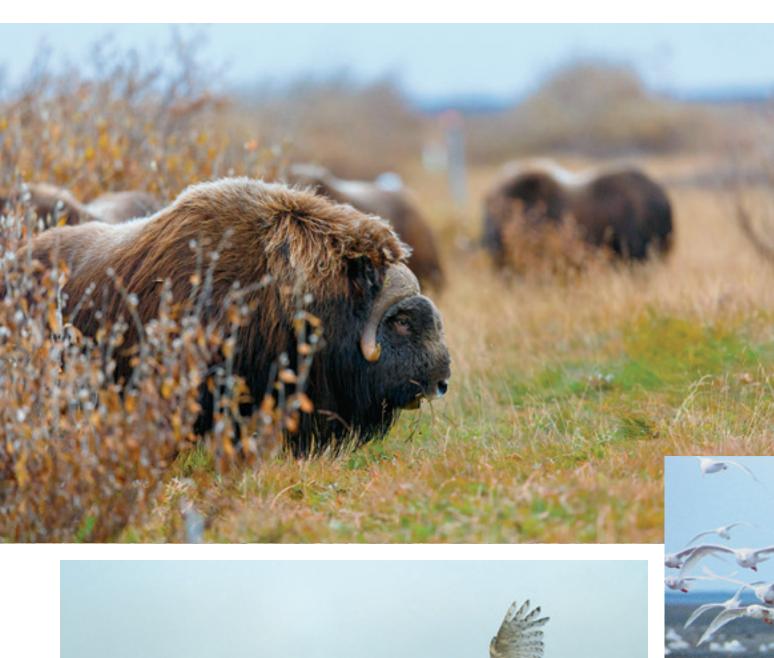
Now the prospect of an industrialized coastal plain has been

resurrected with Donald Trump's election and Congress in Republican control. On the same night Hillary Clinton conceded the presidential election, Alaska Sen. Lisa Murkowski and Rep. Don Young-both Republicans who won re-election to Congress—told reporters they would begin a new effort to open the coastal plain to drilling. Less than a month later, Murkowski-in her ninth attempt—and Dan Sullivan, her Alaska Republican colleague in the Senate, introduced legislation to

allow oil and gas development there. As chair of the Committee on Energy and Natural Resources, Murkowski especially holds considerable sway.

The consequences of drilling are stark and permanent. "Oil and gas development can require harmful seismic blasting and create a vast industrial complex across the coastal plain," says Jenny Keatinge, a federal lands policy analyst at Defenders. "This wild habitat could be forever destroyed by a steel spider's web of pipelines from dozens of well pads, along with airstrips, gravel mines, roads and other infrastructure."

Even well-regulated oil drilling is a messy business, plagued by periodic spills and pollution. The once wild landscape 60 miles west of the Arctic refuge at Prudhoe Bay, America's largest oil field, has been forever changed. "Toxic spills of crude oil and other hazardous materials are common in Prudhoe Bay and on the North Slope," says Keatinge. Birds,





mammals and fish exposed to oil and other chemicals can die from acute poisoning or suffer a slow death from debilitating illness after ingesting these substances or getting them on their fur, feathers or skin.

"There's no question that the coastal plain is once again at great risk," says Robert Dewey, Defenders' vice president for government relations. As one who's participated in this "epic" clash across 27 years, he adds, "This time there's a difference: Politicians, not oil companies, are making the push. The Alaska delegation believes the time is right to open the refuge to drilling, and we're certain they'll do everything they can to make that happen. This could be a year of reckoning. It is essential that conservationists rally again to generate the strong public opposition necessary to protect this unique place."

"Unique" is sometimes used too casually, but in this case it fits. A place of immense natural vitality, the refuge's coastal plain is the only large swath of Alaska's—and thus the nation's—Arctic coastline that has remained off limits to development. And yet it accounts for only 5 percent of Alaska's North Slope.

Seen from the edge of the Brooks Range foothills, the coastal plain contrasts sharply with the mountains' rugged beauty, yet it has a breathtaking grandeur all its own, sweeping outward in a seemingly endless landscape that stretches to the horizon and beyond.

Because I want to experience the coastal plain firsthand, I leave my mountain perch and hike a couple of miles onto the tundra flats, where walking is made difficult, if not torturous, by biting bugs, abundant marshlands and sedge tussocks—unstable, mushroomshaped mounds of plants. Tussocks can be avoided by hiking along the large, braided stream channels that dissect the plain, but then there's no escaping mosquitoes. Or soaked feet. Meandering river channels make stream crossings, or tundra detours, inevitable.

From a narrowly human perspective, the coastal plain itself is a remote, flat, harsh and expensive-to-reach place. In winter, it's draped in darkness and sub-zero cold, wracked by blizzards. In summer, much of it is bug-infested swampland. Yet even in my discomfort, I notice wolf tracks pressed into sandbars, the buzzing trill of a savannah sparrow hidden in the grasses. They remind me that

Musk oxen (top left), snowy owls (left), polar bears (below, on a whale) and many more species rely on the refuge to breed, feed and raise their young.



the coastal plain's true importance has everything to do with wildlife breeding, nesting, spawning, calving, feeding and denning—and nothing to do with humans.

When I first walked onto the coastal plain in the late 1980s, I hadn't known its importance to polar bears. But in the years since, I've learned just how critical it is. In studies done from the mid-1980s into the 1990s, researchers learned that it's a preferred denning area for pregnant females belonging to the southern Beaufort Sea's polar bear population. Some biologists have warned that industrial activities could severely disturb denning females and their young, potentially reducing cub survival.

Concerns about the future of

Alaska's polar bears have increased greatly since then, especially in the southern Beaufort Sea region. As recently as the late 1990s, Alaska's polar bear population was considered to be healthy and stable, perhaps even slightly increasing, but its status changed dramatically over the following 15 to 20 years. Biologists now consider the southern Beaufort Sea population to be declining. While overhunting and Arctic development were once considered the species' primary threats, the consensus now is that climate change and associated declines in Arctic sea ice present the greatest danger.

When scientists studied Alaska's polar bears in the 1980s and 1990s, they determined that 35 percent of

the southern Beaufort Sea's pregnant females denned on land. Studies done between 1996 and 2013 showed that percentage had risen to more than 50 percent. As U.S. Geological Survey polar bear researcher George Durner comments, "Compared to years before 1996, maternal land denning [of southern Beaufort Sea bears] has increased substantially, mostly because of changes in the sea ice." Not only is sea ice retreating, but the amount of stable, multi-year ice needed by bears to hunt seals has also diminished.

Recent research has also confirmed that much of the maternity denning occurs within the Arctic refuge's coastal plain. Not only are more pregnant females denning on land in winter, a growing percentage

Members of the Porcupine caribou herd journey across the Turner River in the Arctic National Wildlife Refuge.



**Robert Dewey.** Defenders' vice president for government relations

## Q: Why is the coastal plain so important?

A: Dubbed by biologists as "America's Serengeti," the coastal plain of the Arctic refuge is one of the last undeveloped preserves on the Arctic Ocean shoreline. This incredible ecological zone is an unparalleled wildlife haven, providing vital habitat for a multitude of iconic and imperiled species including polar bears, wolves, caribou, musk oxen and hundreds of bird species.

Q: Every year for thousands of years the nearly 200,000-strong Porcupine caribou herd has migrated hundreds of miles to reach the Arctic National Wildlife Refuge's coastal plain to birth and raise their young. Some individuals travel up to

# 3,000 miles-the longest of any land animal in the world. What would happen to these animals if the coastal plain is developed?

A: This area is the principle calving ground for this herd. The infrastructure, chronic noise and spills associated with oil drilling are likely to cause the caribou to abandon these historical calving grounds, forcing them into the mountains where forage value is low and predators are more abundant.

## Q: What would happen to all the birds that depend on the coastal plain for nesting if oil drilling is allowed?

A: During the summer months, millions of bird migrate from all the lower 48 states and beyond to find breeding, feeding and resting places on the coastal plain. The construction and operation of a sprawling industrial oil field would permanently disturb this avian

nursery. The disruption to crucial nesting and foraging habitat would likely cause population declines in many of these species, including snow geese, trumpeter and tundra swans and arctic terns.

### Q: What is Defenders doing to protect the coastal plain?

A: Defenders is working hard to galvanize support for legislation to permanently protect the coastal plain as wilderness and leading the charge to defeat congressional proposals to open this treasured area to drilling, particularly as part of federal budget legislation. We are also collaborating with environmental partners to raise the visibility of the Arctic refuge in the press, with the public and on Capitol Hill. Demonstrating strong interest in preserving America's crown jewel refuge has been key to the success we've had to date in saving it. Now we need to do so quickly since the issue could come to a head in Congress as early as this summer.

of all southern Beaufort Sea polar bears are spending part of their summers on land.

So during a time when this polar bear population has declined significantly and the U.S. government has listed polar bears as globally "threatened" under the Endangered Species Act because of sea ice declines, polar bears appear to be increasingly reliant on the Arctic refuge's coastal plain.

Even more than caribou, polar bears may now symbolize what could be lost if the coastal plain were opened to development.

Protecting the coastal plain is more important now than ever because of climate change's effects on Arctic ecosystems and wildlife. Meanwhile, the economic arguments for oil and gas development—especially in a remote and fragile place during a time of climate upheaval and record-low oil and gas prices—have diminished, and companies' interest

in exploration in remote and expensive areas has waned.

Opening the Arctic refuge to oil drilling and associated industrial activities would only feed an increasingly harmful human addiction, while at the same time threatening wildlife and—with ever-shorter winters associated with climate change—the tundra habitat so critical to arctic animals.

"Our nation needs to put its focus elsewhere, on different energy sources," says Jamie Rappaport Clark, Defenders' president. "At a time when our nation's natural heritage is increasingly threatened by development, invasive species and climate change, we simply can't afford to lose one of America's last bastions of pristine wildlife habitat. The biological heart of the Arctic refuge is a priceless global treasure that should be forever protected from destructive oil drilling."

As for the throngs of caribou I was hoping to witness on this visit, by trip's end I only see a couple of stragglers. Crossing back to the foothills, I stop for a moment to imagine the pounding of hooves, the beating of the refuge's biological heart, a place throbbing with life during the short Arctic summer. Barren and inhospitable to our kind, perhaps, but the coastal plain is a homeland to our wild northern kin. Those of us who venture here would do well to show gentle manners and respect, as when we step into someone else's house even if they are not at home.

Born and raised in Connecticut, nature writer Bill Sherwonit has called Alaska his home since 1982 and is the author of more than a dozen books, including Animal Stories: Encounters with Alaska's Wildlife and Changing Paths: Travels and Meditations in Alaska's Arctic Wilderness.

