The Last Great Wilderness By WILBUR M. MILLS

Beyond the Yukon River in northern Alaska lies a vast, littleknown wilderness of nearly 200,000 square miles. These arctic and subarctic lands constitute the largest remaining expanse of undeveloped country in the United States. Opportunities for wilderness preservation are unexcelled.

Massive oil development is, however, altering large areas of the Arctic. Within one year a wilderness the size of Massachusetts has been destroyed. More will follow. The Trans-Alaska Pipeline is slated to cut right through the heart of the Arctic and could have disastrous effects on much of its wildlife, particularly the migrating caribou.

Conservationists should demand an immediate moratorium on future development until the entire Arctic can be studied and a comprehensive land-use plan formulated. In spite of the development which has occurred so far, the Arctic is still the last great, wildlife-rich wilderness frontier we have. Large areas of it should be preserved from exploitation. Wildlife and wilderness values are so fantastic that preservation must not come as an afterthought. Wilderness should be the dominant land use in the Far North.

Presently only the 13,900 square mile (less than 7 percent of the total area) Arctic National Wildlife Range is set aside for the intended purpose of preserving wildlife and wilderness. Established in 1960 by executive order of Secretary of Interior Fred A. Seaton, the Arctic Range is situated in the northeastern corner of Alaska. Bounded by the Canadian Yukon on the east, the Range extends along the Arctic coast nearly 125 miles to the Canning River (from the Canning the oil rigs at Prudhoe Bay lie just a few minutes flying time westward). North to south across its 150-mile span the Range includes samples of the three major physiographic provinces of northern Alaska: the treeless expanse of the coastal plain, the glaciated peaks of the Brooks Range and the spruce-birch forests of the interior.

The Arctic Wildlife Range adjoins *de facto* wilderness which should become part of an even greater reserve. Together with the adjacent area of Canada and the lands south of the

present boundary, an ecologically self-sustaining wilderness of unprecedented quality, size and diversity could be perpetuated. This international wilderness would stand unique as an embodiment of the wild frontier which not so long ago stretched across all of North America.

Such a reserve is far from reality, however. Much of the Canadian area is already leased to oil companies, and expansion of the Wildlife Range into the potential oil-bearing lands of the Yukon Basin would undoubtedly meet with opposition. Developers have more than a passing interest in the Wildlife Range itself. Geologic structures on its north slope indicate a strong possibility of oil, and there may be mineral deposits within the mountain region.

Still the area's greatest asset is its wilderness, which must be protected. It is not too late to establish a great Arctic wilderness, but time is running out. The Arctic Wildlife Range is being degraded by oil activity. Under the terms of the establishing order, the Secretary of Interior allows certain types of exploration to be carried out. I observed its effects during the summers of 1968 and 1969.

Last May 29 (1969) I landed at Peters Lake on the north slope of the Wildlife Range. Literally hundreds of 55-gallon drums and 10-gallon crates of aircraft fuel for the summer's exploration work were already stacked on the north shore. A picturesque Arctic lake had been turned into a common storage yard. The supplies belonged to four major companies which would be operating from the Lake during the season.

From June 5 through July 2, I was camped on the Arctic Coast in the calving area of the porcupine caribou herd. I was here to observe the spring migration and fawning, and experience the solitude of Arctic wilderness. Several times helicopters passed near my camp. These aircraft give easy access to almost any terrain and are widely used in exploration work. Men and equipment can be transported to a remote area, a camp established and geology work carried out. In my travels I came upon the remains of one such camp. A jumble of empty gas cans and smashed crates marked its location atop a windswept tundra ridge. I recorded the information stenciled on the crates and later reported it to the Fish and Wildlife Service in Fairbanks. They checked it out and informed me that the debris was left by an oil company contractor during exploration work in 1968. The company was doing this work under a permit which specified that all trash be removed from the Wildlife Range!

Extensive debris from an old Pan American Petroleum camp was present at Lobo Lake in the Sheenjek River valley when I was there in July 1968. According to the Fish and Wildlife Service, the company had verbally agreed to remove it. It was still there in August 1969. How much other trash has been abandoned in remote areas of the Range by oil crews?

Probably the most abused spots in the Wildlife Range are Peters and Schrader Lakes. Lying at the foot of the high mountains of the Brooks Range, these large natural lakes provide excellent airplane access to both the mountains and the Arctic foothills. The accumulated trash of many years blights this outstanding scenic area. One could not hike a hundred yards along either lake (they have a combined shoreline of over 30 miles) without encountering litter. Barrels, cans, wooden crates and planks, canvas, plastic, steel pipe and aircraft remains were among the junk which marred the shoreline.

Last summer two companions and I devoted over 200 manhours to the cleanup of the lakes. We walked the entire shoreline collecting litter and assembled it at a central location where the Fish and Wildlife Service will arrange to have it removed. It was impossible to identify sources of all the material collected. Some of it was quite old, some was very recent. Many recent pieces bore names of oil companies that have carried on exploration in the area. It was apparent that the names were not merely the company brand of fuel, but were identifying names stenciled on the containers. Unopened crates of helicopter fuel belonging to the Standard Oil Company were found. In the spring of 1968 these crates were mistakenly stacked on the ice instead of on shore. When the ice melted they went into the lake, many drifting to distant shores.

Oil companies were operating in the Schrader Lake area while I was there in 1968 and 1969. In 1968 Standard Oil and Union Oil established camps on the Lake prior to my leaving on July 15. There was extensive aircraft activity during the last two weeks of my stay.

Last summer operations were even more extensive. Atlantic-Richfield was there prior to my arrival on July 3. On July 12 Phillips Petroleum established a large camp. A week later Conoco came. By July 19 there were at least five helicopters operating daily from Schrader and Peters Lakes. Helicopters of oil companies not camped at the Lakes often visited the area to refuel. Cargo planes arrived regularly to supply the camps. There was not a spot within reasonable hiking distance where one could

escape the roar of aircraft. They were active constantly during the day, and often well into the evening.

Exploration permits for the Arctic Wildlife Range were issued to six oil companies for the 1969 season. Separately and independently they each establish their camps and conduct their exploration work. Work which could be done once, on a cooperative basis, is duplicated many times over because of the secrecy associated with oil exploration. In the meantime the wilderness is suffering.

The Phillips and Conoco camps were located on a flat neck of land between Schrader and Peters Lakes. Many oil companies had camped there in past years. Hundreds of five gallon cans littered the area. Some were quite old, others had hardly begun to rust. Many were full of fuel, their seals having never been broken. It is impossible to pinpoint responsibility for this debris, so it continues to accumulate. The area contained several large, shallow pits where camp garbage had been burned. A battered engine cowling, from a cargo plane which had fallen through the ice several years ago, had become a toilet for the oil companies. Of course the ubiquitous 55-gallon drum was present in varying degrees of deterioration. Large areas of tundra had been completely denuded of vegetation from burning and from heavy and continued use. Fragile Arctic tundra cannot take the intensive type of camping which oil companies seem to require.

The collection area for our lake cleanup project was adjacent to the Phillips and Conoco camps and we visited them on several occasions. Our observations serve to illustrate the incompatibility of oil activity on the Arctic Wildlife Range. The Phillips camp consisted of seven large tents, 12 feet by 12 feet in floor size. The Conoco camp nearby had five similar tents. Approximately eighteen people occupied the two camps. Although garbage burn pits existed nearby, Phillips had created another in front of their cook tent. The vegetation was completely burned over an area 5 feet by 4 feet.

We had cleaned the shoreline across from the camps before the companies arrived. On July 22 we found fresh debris on this shore consisting of two five-gallon gas cans, a water-logged egg crate, a large plastic bag and a sleeping bag carton marked "North Slope Sales-Sagwon." On July 27 we found a carton and styrofoam packing for a portable generator with the name "Phillips Petroleum" hand written on it. On July 29 we found a wooden gas can crate. The day I left Schrader I noted some empty gas crates at the edge of the Lake directly in front of the camp. They were



Barren ground grizzly stalking the beach along the frozen Arctic Ocean-Wilbur M. Mills

partially in the water and would soon very likely be carried to the far shore by wind.

In a casual conversation, an oil company employee told me they had recently chased a wolf with their helicopter. "It was a large black one and saliva was dripping from its mouth as it ran under the machine," he said. From the manner in which he spoke, it was evident that he felt nothing was wrong with such action. Another employee said that the oil companies often used helicopters to chase grizzly bears away from their camps, running the animal until it was exhausted. Undoubtedly the bears were attracted by camp garbage which, if properly handled, would not be a problem.

Using helicopters, an oil company can explore extensive areas in a single season. In addition to the Schrader Lake camps, another large base camp was located at the abandoned DEW line site at Demarcation Point. From these camps geologists would make daily and sometimes overnight trips. Oil crews had recently been in the Hulahula, Kongakut and Firth River valleys and they planned to conduct surface geology in all major river valleys on the north slope of the Wildlife Range that summer.

Contrary to the establishing order, part of the Range has already been leased for oil activity. In 1965 Secretary of Interior Udall signed an order making available several blocks along the Canning River. Currently 37,000 acres are under lease and applications are pending on other areas. Included in the acreage are places of special value to the Wildlife Range. Among them are Shublik Island and Shublik Springs. I visited these spots last summer. They support a unique North Slope plant community and are well used by moose and grizzly bear.

The Arctic Wildlife Range was established supposedly "for the purpose of preserving unique wildlife, wilderness and recreational values," according to Secretary Seaton's executive order. As managing agency, the U.S. Department of Interior has been remiss in carrying out the intent of that order. The presence of extensive commercial activity is disturbing the natural environment and preventing visitors from experiencing fully the values for which the Range was set aside. To those who value wildlife and wilderness, the present management policy is intolerable.

There is ample evidence of oil company misuse of the Range. Based on my own limited observations, I can only assume that the misuse is even greater than I have stated it. They are littering; they are damaging terrain; they are disturbing wildlife. It would be naive to think otherwise. With the highly competitive atmos-



Newborn caribou fawn on the Arctic Coastal Plain-Wilbur M. Mills

phere that prevails in Arctic oil development, could a company be expected to carry out their garbage if they knew they could get away with leaving it behind? Could their personnel, who are unfamiliar with the principles of ecology, be expected to avoid harassing such curiosities as a wolf or grizzly with aircraft?

In the vast open spaces of the Arctic, the possibility that someone might be watching is very remote. This is especially true since, on both the state and federal level, funds and manpower for policing the North Slope have been lacking. As of August 1969, the Fish and Wildlife Service has never had any funds specifically designated for management of the Arctic Wildlife Range.

The Arctic is a very fragile land. Too little is known about the impact of man's activities on its ecology. Inventories of its wildlife have not been fully made. The productivity of faunal species per unit area of habitat is not known. Such information is essential if we are to preserve rare species like the wolf, the tundra grizzly, the peregrine falcon and the gyrfalcon. The Arctic Coastal Plain contains the calving grounds of the largest remaining caribou herds in North America. What long-term effects will massive oil development have on these herds? We do not know.

Most of Arctic Alaska is already committed to oil development (specifically the Prudhoe Bay area and the Naval Petroleum Reserve). It is essential that we keep some of our Arctic lands, particularly a portion of the Coastal Plain, in a natural state. The Arctic Wildlife Range should be managed as an undisturbed wilderness, a control area against which we can measure the effects of development elsewhere in the Arctic. It should be a critical part of a planned, integrated program of Arctic resource and environmental management. Such a program should include extensive areas which are closed to oil development.

Prompt, decisive action is required by concerned citizens and the Department of Interior if the values of the Arctic Range are to be preserved:

 The Arctic National Wildlife Range closed to all oil and and mineral leasing, exploration and development until Congress can review the area under the terms of the 1964 Wilderness Act. Hearings are scheduled for October 1971. Existing leases cancelled.

- Adequate funds provided to the Fish and Wildlife Service for management of the Arctic Range and for enforcement of regulations which protect its wildlife and environment.
- Studies initiated to develop an overall management and land use plan for the Arctic Range, to inventory important wildlife populations and identify specific areas of significance to wildlife.
- Debris at Schrader Lake, Lobo Lake and other areas which receive recreational use be removed from the Range.
- 5) The southern boundary of the Arctic Range reviewed for possible inclusion of such important areas as the complete drainage of Old Woman Creek and the entire length of the Sheenjek and Coleen Rivers.
- 6) Efforts initiated with the Canadian government toward establishing a wildlife reserve in northwestern Yukon Territory adjacent to the Arctic Wildlife Range. Such a reserve would afford protection for the Arctic Range caribou herd which migrates across the international boundary to winter.

The Arctic Wildlife Range needs help from those who love the land and the life that evolved in harmony with it. Only with strong public support can its special qualities be perpetuated. Its immediate fate is in the hands of Secretary of Interior Walter J. Hickel; he sits in a big office in the Interior Building, Washington, D.C. 20240.