Our group of wilderness campers perched on the rocks, enjoying the sounds of the nearby waterfall and the tide stealing in across the flats. Granite walls soared thousands of feet in the air; icebergs floated by on their way from calving glacier to the open sea. Loons called, and a rustling in the woods across the channel meant that a bear or deer might step out onto the beach at any moment. We were more than 30 miles (48 km) by boat into the Tracy Arm-Fords Terror Wilderness, and it was easy to feel that we were far removed from civilization. The possibilities for discovery were endless. This was the “southeast Alaska experience” that has been marketed to visitors and that some think will always be here due to wild weather, big seas, and an abundance of bears.

Suddenly a gleaming white behemoth heaved into view, spewing amplified natural history information from loudspeakers. As the giant cruise ship powered by only a few hundred yards from camp, brightly clad visitors pointed their cameras and waved vigorously at us. A large wake barreled across the channel. Kayaks and zodiacs were launched, with chattering occupants aiming for shore. In an instant, solitude vanished (see figure 1).

**Marine Highways**

Perhaps we should not have been so surprised and dismayed. Here in southeast Alaska, the oceans are long-distance transportation routes. Barges hum past on the straits and floatplanes bring visitors to remote bays. Forest Service wilderness ends at the mean high tide level. That means that the long skinny fjords that dead-end at glaciers and imposing sculpted walls are not wilderness. Instead they provide marine highways for sightseeing cruise ships and private yachts, motorized fingers that extend scores of miles, deep into the heart of the wilderness. Although the use on the water is not within the wilderness boundary, the experience of visitors on shore is directly affected by that use.

In the lower 48 states, many wildernesses abut transportation corridors where one can hear and observe motorized traffic. However, in those places, trails lead deep into the wilderness, where visitors can easily get away and find quiet and solitude. In southeast Alaska, things are different. There are not many trails, so few visitors penetrate...
past the first half-mile of rain-soaked, junglile interior. Use is concentrated on the rocky shores and islands where access is relatively easy—and solitude is increasingly hard to find (see figure 2).

Solitude can generally be assured for those hikers who are brave and strong-willed enough to ascend the cliffs into the heart of the wilderness. However, even here, more and more small planes are landing on the remote lakes that dot the high country in an attempt to avoid the more congested coast. Guides are clamoring for access to places where they won’t run into other people. User groups who object to seeing other parties have exchanged heated words.

The Wilderness Act defines a wilderness area, among other things, as possessing outstanding opportunities for solitude. Generally, as visitors we expect to see and hear very few people when we make the effort to enter wilderness, yet anyone who has tramped a popular trail in lower-48 wilderness areas has encountered multiple groups and endured a night of camping near other parties. The wildernesses in Alaska have stood out as touchstones for natural quiet and solitude. But are we in danger of losing this essential and unique quality? Is the natural quiet disappearing from the wilderness areas in southeast Alaska? Can anything be done to preserve it where it does exist?

**Wilderness Solitude Monitoring Project**

In an attempt to find out about solitude, the Regional Wilderness Solitude Monitoring Project was launched, spearheaded by Forest Service wilderness personnel Mary Emerick, John Neary, and Kevin Hood. Along with Dr. David Cole, Forest Service research geographer with the Aldo Leopold Wilderness Research Institute, we conducted field trips in the South Baranof and Tracy Arm-Fords Terror Wildernesses in the summer of 2007. Our group struck up conversations with sightseers and hikers, paddled, hiked, boated, and flew, and ultimately developed a draft protocol for collecting information that can be used to assess trends in opportunities for wilderness solitude.

Our talks with visitors—long-time guides, locals, and repeat visitors—struck a chord with many. Everywhere we went, people agreed that there were more: more jet skis, more helicopters, more people on shore, and more boats at anchor. “You used to be the only one in this bay,” was the common refrain. Others told us they avoid areas they used to visit and go to new ones where they won’t meet others. Try camping near the beach at the back of long, thin bay, with five boats running generators and pointing binoculars at your camp, and you will get the idea (see figure 3).

We found litter and user-created trails in previously pristine spots, indicating people are fanning out from the areas that are commonly used. These anecdotes provide clear evidence that things are changing.

Other marine wildernesses, most notably those managed by the National Park Service, such as Glacier Bay and Isle Royale National Parks, have addressed water use by regulation, including limiting large cruise ships and establishing no wake and quiet zones. But the Forest Service does not control the tidelands. So what can be done? The first step is to document what is going on. How are opportunities for solitude changing? Is there a problem? If so, how bad is it?

The task of monitoring opportunities for solitude is difficult because solitude is such an ambiguous term. Walk around your office and ask and you will get many different answers. Seeing just one other person is unacceptable to some visitors. Others will accept the presence of many cruise ships if it means that they can camp or hike where they want. Our protocol does not attempt to monitor solitude per se. Rather it monitors those things most likely to affect opportunities for solitude—motorized boats, aircraft, and crowds of people—things that emerged from our conversations with visitors and our years of personal experience.

After much discussion, we boiled the protocol down to a few elements that could be readily monitored. We decided to conduct monitoring in two different situations: (1) while camping at popular destinations, and (2) while traveling. Most of the events to be recorded are interactions with boats. Because the sights and sounds of a skiff have much less impact than a cruise ship whose

![Figure 2—The oceans are transportation corridors: Gut Bay, South Baranof Wilderness. Photo by Mary Emerick.](image-url)
loudspeakers can be heard for three miles (4.8 km), boats were classified by size as follows:

- 250+ passenger cruise ship
- 16–249 passenger ship
- 6–15 passenger ship
- 1–5 passenger ship
- Kayak, canoe, rowboat

We also recorded a class for the distance of the boat from the observer. Distance seemed important because the normal commerce of a barge chugging along three miles (4.8 km) away is less bothersome than a jet ski screaming by at close range. We were also interested in the nature of encounters with people associated with boats. If there were any verbal exchanges, this was recorded. If people camped onshore, we noted the number of people as well as whether they were within our immediate use area and whether a verbal exchange took place.

We counted aircraft if they were flying below a height of 1,000 feet (305 m) above ground level. If so, they were classified as flying, landing, or taking off. Encounters with people on aircraft were recorded the same way they were for boats. Finally, we made a subjective assessment of the magnitude of impact on solitude as follows:

- Low—not disruptive (e.g., boat passing in the distance)
- Medium—somewhat noisy or in close proximity, noticeable
- High—loud, very close, disruptive (e.g., jet ski, plane takeoff, boat generator running all night)

**Preliminary Observations**

After just one season of using our protocol, we have hard data to back up our initial impressions. We were heartened to find that opportunities for solitude are still readily available in many areas. Some locations had fewer than 15 minutes of disruption within a 24-hour period. However, at attractions such as Endicott Arm, with a majestic glacier at its end, the sights and sounds of people were nearly constant during daylight hours. At Fords Terror, visitors trooped on foot and paddled by kayak so close to our camp that we could hear their conversations. From a human perception perspective, we were surprised to observe that where the hum of motorboats was nearly constant, we learned to tune the noise out. In less popular bays, the occasional passage of a motorboat or the encounter of other visitors hiking was so unexpected that it tended to bother us more than if we were constantly exposed to it.

Development of the protocol has allowed us to produce a snapshot in time with which we can measure changing conditions and a framework for defining opportunities for solitude. There has been widespread acceptance for this effort among our partners and local users—a sense that “it’s about time.” It will not be easy to preserve opportunities for solitude that are being lost due to uses that occur outside of the wilderness boundary; perhaps it is impossible (see figure 4). Nevertheless, we believe it is our responsibility as wilderness stewards to document what is happening in this wild, remote, and unique part of the world. **IJW**

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Figure 3—Typical campsite in Endicott Arm, Tracy Arm-Fords Terror Wilderness. Photo by David Cole.

Figure 4—A visitor experiences solitude in the South Baranof Wilderness. Photo by Mary Emerick.