

Daniel Smiley: Using Science to Protect Nature

Dan Smiley's greatest legacy was the example he set for generations to follow on how to use science to protect the balance of nature.

Basing his decisions on careful field observations, Dan determined when to let nature run its course, or when to intervene to save a species ... and the entire ecosystem. He believed strongly in preserving the natural order. The return of the peregrine falcon to the ridge is one such conservation success story.

Once common here, the peregrine falcon nearly disappeared from the northeast due to widespread DDT use in the 1940s through 1960s.

In the mid-1950s, Dan boldly resisted the use of DDT in the northern Shawangunks to control the gypsy moth. A broad-spectrum insecticide, DDT also killed all other forest insects exposed to it. Accordingly, Dan asserted that DDT could cause irreparable harm to the Shawangunk ecosystem and insisted that natural controls would eventually bring the species into balance.

Dan's decision to keep DDT off the ridge had two, positive results: his later studies showed that the gypsy moth was eventually controlled without resorting to pesticides. And eliminating DDT reduced the exposure to peregrines and other ridge-dwelling species.



Ranger and research staff observing cliff-nesting raptors



Paul Huth (current Director of Research) [L] with Daniel Smiley [R]

Dan did more to help restore the peregrine to the wild. In the mid-seventies, Dan approved of and assisted with the release of captive-bred peregrines along the ridge. Finally, after this species' absence of more than 40 years, a healthy peregrine pair returned in 1998 to nest on the Shawangunk cliffs.

Today on the Shawangunk Ridge, two of the five historic nesting areas have been reestablished. Through the Peregrine Project, Preserve research staff and volunteers monitor the conditions affecting their survival.