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Grand Canyon History Tidbit by Kim Besom

Grand Canyon Butterflies

In honor of last week's North Rim Butterfly Count, organized by Canyonlands Park Ranger Robb Hannawacker, some tidbits about butterflies.

Early butterfly studies: Grand Canyon butterfly counts and monarch butterfly tagging research are more recent projects, but in 1955-57, Grand Canyon Chief Naturalist Louis Schellbach and his staff participated in a nationwide monarch butterfly count and tagging study, organized by F. A. Urquhart of The Royal Ontario Museum in Toronto, Canada. Prior to that study, it had been believed that "there were no Monarch butterflies in Arizona". During the study, more than 100 monarchs were counted on both rims, easily disproving the earlier beliefs about the status of monarchs in Arizona. Monarch larvae, were also observed feeding on native milkweed, proving that monarchs were also breeding in Arizona.

Endemic butterfly species: According to the park's website, there are 5 butterfly species endemic to Grand Canyon: the Grand Canyon ringlet, Kaibab swallowtail, Schellbach's fritillary, Mead's wood nymph, and Schellbach's tailed copper.



Grand Canyon ringlet

Butterfly poaching:

"I plan on really cleaning house on Rocky Mountain butterflies next year," wrote one of three men involved in butterfly poaching at Grand Canyon and other national parks. "Am bringing 20,000 envelopes and I expect to fill them all up!"

Between 1983 and 1992, three men collected and trafficked protected butterflies from western national parks, forests, and wildlife refuges. In one of the first sting operations to involve the poaching of invertebrates, a Fish and Wildlife Service undercover agent exposed the illegal activities after one man sold a pair of Kaibab swallowtail butterflies for \$400. Searches of the poachers' homes turned up more than 2300 butterflies with an estimated value of \$307,642. One hundred twenty-eight butterfly specimens were returned to Grand Canyon, mostly endemic Kaibab swallowtails.

Also uncovered during the operation were detailed collection data for the butterflies and numerous letters containing suggestions for evading detection by park rangers. "Myself, I use the BioQuip pocket net- known as the 'National Park Special' for these tricky spots...", and "I find later afternoon or early mornings when few people are around best for collecting- just say you're

a botanist." Letters were sometimes signed "Yours in crime" or "Yours in poaching". Felony charges of trading in protected wildlife and with conspiracy to poach from public lands were brought against the men. All three pleaded guilty and received punishments ranging from a 5-month jail sentence and a \$3000 fine, to probation and community service.



Some of the Kaibab swallowtail specimens recovered from butterfly poachers