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Rethinking Extinctions: Conservation Status of Hawaiian Leafroller Moths in the Genus *Omiodes* (Crambidae). Partly because the genus *Omiodes* (formerly *Hedylepta*) contains the only native Hawaiian insects to be specifically targeted by biological control programs, the conservation status of this group has been of interest to entomologists, conservation biologists, and agriculturalists. Due to suspected pressures of biological control agents, accidentally introduced parasitoids and predators, and habitat destruction, 14 of the 23 Hawaiian species have been listed as extinct since the 1980s. To better understand current distributions and conservation status of *Omiodes* and other Hawaiian Lepidoptera, we have conducted light trapping and host plant surveys on most of the Hawaiian Islands, and have discovered populations of at least 6 “extinct” species. Several species formerly listed as extinct, such as *O. continuatalis* and *O. monogona*, are actually widespread. Other species, such as *O. asaphombra* and *O. anastreptoides*, have a more restricted range. Yet others, such as *O. epicentra* and *O. telegrapha*, have not been recorded for a hundred years, and are likely to be extinct. Controlled exposure trials have also been completed to assess actual parasitism rates in populations of some of the rediscovered species. Systematic analyses of molecular data shed further light on the evolutionary significance of certain populations, suggesting that some morphotypes described as distinct species may be color variants of other species. Our findings highlight the value of focused surveys and phylogenetic analyses when identifying threatened populations of insects and other cryptic organisms.