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A Checklist of the Moths of Alaska

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Abstract

This article represents the first published complete checklist of the moth taxa, resident and occasional, recorded to date for Alaska. Seven-hundred and ten species are listed. General species distribution ranges within the state are included. Three North American records are listed for the first time: *Cydia cornucopiae* (Tengström); *Eucosma hohenwartiana* (D. & S.); *Acronicta menyanthidis* (Vieweg).

Key words: Alaska, checklist, Lepidoptera, moths, North America

Introduction

The Lepidopteran fauna in Alaska is poorly documented in the literature and most reports are devoted to butterflies, which to many collectors are more charismatic than moths. Whereas butterflies are generally easily visible, many of the moth species are very small, secretive, and cryptically marked, and thus easily overlooked in the field. Additionally moths have been traditionally hard to identify, but that situation is changing now with the advent of various web sites and publication of new books. In most areas of the state, except for very early and very late in the season, blacklighting is not generally possible because of the long photoperiod south of the Arctic Circle, and twenty-four hour daylight northward. In the extreme southern portion and in the panhandle, blacklighting is possible for a few hours each night during the summer, weather permitting, if the lights are placed in shaded locations. Pheromone traps are effective for collecting some species, but have the disadvantage that only males are attracted. Consequently most collecting is by hand net and frequently requires beating the brush to disturb resting individuals. A few species visit flowers, where they are clearly visible. Other species fly rapidly over rock slides and scree slopes, but are not easily seen and even less easily collected. This situation most probably accounts for the paucity of Microlepidoptera records, where only the Tortricidae have been collected intensively. Based on the geographic size and vegetative diversity of the state, one would expect to find numerous microlepidopteran species, especially members of the Gelechioidea. To date, 710 species have been recorded from the state. Based on projections made by several lepidopterists, including an author of this paper (JDL), in a given region moth species outnumber butterfly species by a factor of 15–20:1. There are 84 butterfly species currently recorded for Alaska,