Body Composition and Migration Potential of Army Cutworm Moths Taken from Alpine Aggregation Sites in Glacier Park [TWS]

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Grizzly bears (*Ursus arctos horribilis*) consume army cutworm moths (*Euxoa auxiliaris*) from late June through mid-September on alpine talus slopes in Glacier National Park, Montana. To better understand the nutritional importance of army cutworm moths to grizzly bears in Glacier National Park, we determined temporal abundance patterns, body mass, total moisture, total nitrogen, total lipid, and gross energy of moths collected from alpine moth aggregation study sites throughout the summer. Army cutworm moths arrived in the alpine of Glacier National Park in early July in 1994 and in late June in 1995. We did not capture any army cutworm moths after 10 August in 1994 or after 30 July in 1995. Army cutworm moths showed a marked increase in body mass, total moisture, total lipid, and gross energy, and a decrease in total nitrogen over the course of the summer. We calculated that an army cutworm moth flying in late summer through still air, presumably at a speed that minimizes cost of transport, could fly 140 km using body lipid reserves alone.