Golden Sun Moths and citizen science: outcomes from a survey of lowland grasslands in the ACT region, 2008–09

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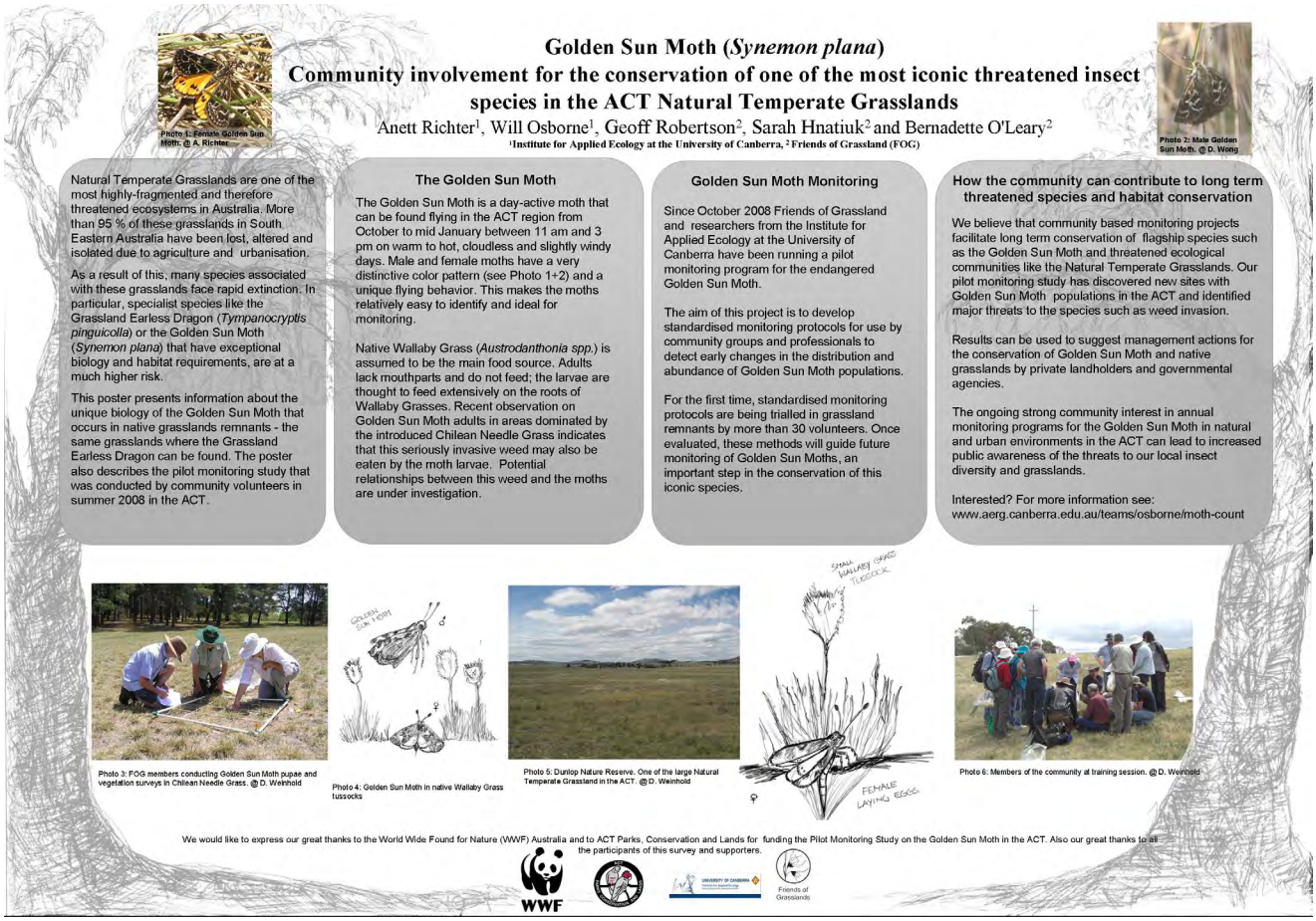
The Golden Sun Moth (*Synemon plana*) is one of the specialist species found in south-eastern Australia's lowland Natural Temperate Grasslands. With 95% of these grasslands having been destroyed or modified, the moths are now a nationally critically endangered species. Over the summer of 2008–09, members of the University of Canberra's Institute for Applied Ecology and Friends of Grasslands organised a volunteer survey of 28 grasslands in the ACT region. We found that, with training, naive volunteers could reliably count flying moths and collect pupal cases. The data they collected showed that:

- moths were present in 71% of the grasslands surveyed, most frequently in low–moderate abundance;
- they occurred in native grasslands dominated by wallaby grasses (*Rhytidosperma* spp.) and spear grasses (*Austrostipa* spp.), as well as in grasslands dominated by the exotic Chilean Needlegrass (*Nassella neesiana*). Two of the six most abundant populations were in Chilean Needlegrass-dominated grasslands.
- 60% of the pupal cases examined were male when the ratio of male:female expected was 50:50.



Sarah Hnatiuk is now retired after a varied research career involving work with normal and Downs Syndrome babies, Central Australian Aborigines, elderly women, the wildlife of Aldabra Atoll in the western Indian Ocean, and more recently assisting with inquiries by members of the House of Representatives committees, principally on environmental and rural topics. She is now engaged in a number of ACT citizen science projects, including Frogwatch, Vegwatch and monitoring the success of Greening Australia's community plantings.

Anett Richter obtained a PhD from University of Canberra with a thesis entitled 'What makes species vulnerable to extinction following habitat fragmentation and degradation? A test using the insect fauna in native temperate grasslands in south-eastern Australia'. She is now at the German Centre for Integrative Biodiversity Research working on a citizen science strategy for Germany and an analysis of the current citizen science activities in Germany.