

Insect Response to Reclaimed Natural Gas Well Pads in Semi-Arid Wyoming¹

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Abstract: Insects, the most diverse animal group on Earth, provide a wide-array of ecosystem services. However, 'the little creatures that run the world,' are often underappreciated in restoration and conservation studies. Aside from providing biodiversity, insects are critical pollinators and sources of food for higher trophic levels. Four years of field studies have shown insects respond positively to restoration efforts on well pads in the Jonah Infill and Pinedale Anticline natural gas fields. While the first three years of field work focused on collecting insects on well pads with various vegetation communities and comparing them to insects found in adjacent reference systems clearly showed insects are attracted to reclaimed well pads, determining whether insects disperse from well pads was not an objective. The fourth year of fieldwork involved using immuno-marking techniques to determine whether insects are using revegetated well pads as resource islands or sinks. Here, we demonstrate how insects respond to and disperse from well pads undergoing restoration activity.³

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3. Work reported here was conducted near 42.8679° N, 109.8634° W.