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A Comparative Study of the Nesting Behavior of Two Species of Digger Wasps in Jackson Hole, Wyoming

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characters and was the species most commonly encountered. The only pollinators found were bumblebees, Bombidea, on C. miniata plants.

A Comparative Study of the Nesting Behavior
of Two Species of Digger Wasps
in Jackson Hole, Wyoming
Cleo C. Pierre

This study observes the nesting behavior of two species of digger wasps, Philanthus pulcher and P. crabroniformis, in the sandy banks of the Snake River at Jackson Hole, Wyoming during July and August of 1967. The noting of differences in two species sharing the same habitat was the primary result of this study. P. pulcher nests in July and early August, while P. crabroniformis begins her nesting as P. pulcher dies, thus enabling these two wasps to share the same habitat. Both species nest in firm, sandy loam. P. pulcher digs her nests with her mouthparts, dispersing the soil with her abdomen, thus effectively hiding the entrance to her burrow. She does not however, make distinct orientation flights. P. crabroniformis was seen to dig her nest in the same manner as P. pulcher except that she does not disperse the dirt and thus her nests are quite conspicuous. When she leaves her nest, P. crabroniformis makes circular orientation flights. The prey of P. pulcher are large bees and wasps of various families, usually captured on the flowers of Eriogonum by approaching downwind. The prey of P. crabroniformis are always of the family Helictidae. P. pulcher flies straight back to her nest after capturing her prey and then makes a dash for her burrow, while P. crabroniformis makes short stops on the way back, probably to elude the parasitic S. trilineata, a fly which also pursues P. pulcher. The structures of the burrows of the two species were found also to differ significantly.