



The Katharine Ordway
Natural History Study Area

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ORDWAY
BULLETIN No. 58

MACALESTER
COLLEGE

located at 9550 Inver Grove Trail (Dakota County Road 77), Inver Grove Heights, Minn.

WINTER PREPARATION at ORDWAY

It was afternoon, mid-October and alongside the footpath was a gopher mound which was special among the many such mounds at Ordway. This mound became the repository for at least one Tiger Salamander (Ambystoma tigrinum), which spent more than an hour in preparing himself for winter torpor.

When first I observed him he had already interred himself for about half his length, only his lower back and hind legs and tail being visible. He had entered the soft earth, newly-dug about a week before and dampened by a recent rain; this seems of some importance as the weather (1976) was so dry for more than 12 months that the earth had become parched and quite hard and it would appear that creatures such as salamanders had fewer moist places to select as their winter dormitories.

The creature seemed to make headway into the earth-mound with his snout and front legs, moving the displaced dirt back along his body to a point where his rear legs could shovel it further behind, using a gouging motion rather than a thrusting one; the interval between such actions was about two or three minutes but slowly the lower part of his body disappeared into the mound.

I returned along the meadowpath an hour or so later; the burial of the winter-sleeper was complete and his entry hole had been filled by the final movement of dirt. There appeared also to be two other places in the same gopher mound at which similar self-interment had been made.

This may not be an ordinary behavior for salamanders and probably was brought on by the shortage of wet spots, which they usually prefer for slumbering away the months until they can revive and continue their cycle in the small vernal pools and ponds. Such adaptations to changing conditions are vital to the survival of species and the reptile world has some remarkable examples both of success (the Turtles) and of failure (the Dinosaurs).

At least one Tiger Salamander was observed responding to this natural force for survival.

R J CHRISTMAN,
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Oct. 20, 1977