## **MAMMALS**

## BADGER KILLS AN EVASIVE BLACK-TAILED PRAIRIE DOG

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On the prairies of Canada, prey of American Badgers consists primarily of Richardson's Ground Squirrels, pocket gophers,3 and, in a restricted area of southern Saskatchewan, Blacktailed Prairie Dogs. North American Badgers frequently hunt hibernating prey in autumn, juvenile ground squirrels in spring, and rarely, adult squirrels in summer.3 ground Badgers often excavate their prey but occasionally catch prey above ground.2,3 Balph described badgers waiting inside a burrow to ambush prey.1 Schwab described a hunting badger waiting at the entrance to a burrow occupied by a Richardson's Ground Squirrel and ambushing it at the entrance.4 In another incident, he

watched the same badger lying in a bush and ambushing two Richardson's Ground Squirrels that moved to within 10 m of the badger. report Here, we incidence of a badger chasing and killing a Blacktailed Prairie Dog as has been reported only once before.2

Our observation occurred in Grasslands National Park, Saskatchewan, at the Broken Hills Prairie Dog Colony (49° 10'N, 107°

36'N). On 16 May 2006, we were surveying the Black-tailed Prairie Dog colony for nesting Burrowing Owls. Our observation site was 700 m south and 40 m above the colony on a ridge.

We arrived at the observation site at 0925h and did not notice the badger on our initial scan of the colony. At 0930h, we saw a badger chasing a prairie dog. They were about 20 m apart, but the badger gained rapidly. When the badger was about 3 m from the prairie dog, it swerved and increased its lead on the badger, then dove into a burrow. The badger made a quick scan of the vicinity and immediately started digging into the burrow. Two large chucks of earth were



Figure 1. The badger broke the entrance of the burrow into large chunks before excavating the prairie dog burrow at the end of the chase.

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tossed about 0.5 m while smaller pieces of earth flew even farther (Fig. 1). Every 10 to 15 seconds, the badger emerged from the burrow, looked around, and then continued digging. After about 3 minutes, the badger emerged from the burrow with a dead prairie dog in its jaws. The badger took the prairie dog west to its den burrow.

We surmise that the badger was lying on or near its den at the start of the chase, a behaviour similar to that described by Schwab when a badger Richardson's Squirrel.4 However, our observation involved an aboveground chase followed by a burrow excavation, rather than a simple ambush on the surface as reported by Eads and Biggins.2 Based on the location of where we first saw the badger and prairie dog, the prairie dog must have approached to about 20 m from the badger's location before the badger gave chase. Using a hand-held GPS, we determined that the chase occurred over a distance of 183 m. A search showed that none of the prairie dog burrows within 50 m of the badger den were occupied. Thus, the depredated prairie dog likely wandered closer to the badger than others.

This badger demonstrated its ability during its rapid excavation of the prairie dog burrow. We do not know what transpired below ground, and thus can only speculate on why the prairie dog did not escape. Typically, prairie dog burrows have several passageways that allow them to escape predators. Possibly the prairie dog was not familiar with the burrow and may have ended up in a dead-end tunnel, where it was trapped by the badger. Eads and Biggins reported two successful aboveground attacks by badgers on prairie dogs in seven observed attempts.2 They suggested the badgers initiated attacks based on the speed, angles, distance, and escape response of the prairie dog. We did not see the initiation of the encounter, but the prairie dog passed many potential escape holes over the course of a relatively long chase. We do not know if the badger waited for an opportune time to initiate the attack. Although the badger did not capture the prairie dog above ground,<sup>2</sup> the high-speed chase may have caused the prairie dog to make a poor choice of escape burrow. This could have been part of the badger's strategy.

Aboveground attacks by badgers on prairie dogs are rare.<sup>2,3</sup> Between 1998 and 2008, we have spent about 1800 person-hours over 140 days searching prairie dog colonies for Burrowing Owls. This observation is the only time we saw a badger chasing a prairie dog.

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