

# RANGE EXTENSION OF THE BADGER (*TAXIDEA TAXUS*) IN SOUTHERN ILLINOIS

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## ABSTRACT

The range extension of the badger (*Taxidea taxus*) into southern Illinois is reported.

## INTRODUCTION

The badger is considered a resident of open grasslands, prairies, and treeless regions (Hoffmeister and Mohr 1972, Lindsey 1982). The badger's southern range boundary in Illinois as of the late 1940's (Hoffmeister and Mohr 1972) was Fulton and Douglas counties. These central Illinois counties are within ecotypes compatible with stated badger habitat. Klimstra and Roseberry (1969) reported 1965 occurrences in Randolph and Washington counties; these represented 150 km southward extension of badger range. Both counties are well within the southern one-third of the state and outside the major prairie region of Illinois. This paper documents further southward expansion of this mammal's range in Illinois.

## SPECIES ACCOUNT

On 25 June 1984 a road-kill badger picked up on Route 13 (Sec. 12, T9S, R2W) between Murphysboro and Carbondale, Jackson County (1, Fig. 1), was submitted to the Cooperative Wildlife Research Laboratory. The carcass, in poor condition with most of the visceral and skeletal features crushed, was a female weighing 6.95 kg and judged to be an adult. Examination of the reproductive tract and mammary tissue revealed no evidence of breeding this year. Another badger was killed on Route 13 approximately 0.6 km east of Murphysboro on 31 August 1978 (G. Hubert per. comm.); this specimen is believed deposited at the University of Illinois. These two

reports represent the southern most current known occurrence of the badger in Illinois.

According to M. Sweet (in litt.) other recent records of the badger in the southern Illinois area are: (2) Clinton Co.: 8 km west of Carlyle on Route 50, road-kill, 19 February 1983. (3) Franklin Co.: 3.2 km north of Benton, road-kill, 26 June 1982. (4) Jefferson Co.: Sec. 19, T15S, R4E, trap-mortality, 3 January 1982. 0.8 km east, southeast of Walnut Hill, road-kill, 12 April 1983. (5) Perry Co.: Sec 17, T5S, R1W, trapped and released 5 January 1983. (6) Randolph Co.: 6.5 km west of Prairie du Rocher. (7) Washington Co.: Sec. 12, T3S, R5W, sighting, August 1983. Sec. 29, T3S, R4W, sighting, Summer 1979 (Fig. 1).

## DISCUSSION

Although these records indicate the badger has recently established a population in southern Illinois, this may constitute reinvasion of a previously occupied area. Robert Kennicott (Cory 1912) stated that as late as 1928 badgers occurred as far south as the Kaskaskia River. Though this report is not very specific, it is of interest that Clinton, Randolph, and Washington counties lie within the Kaskaskia River drainage.

At the time of Kennicott's observation the land of southern Illinois consisted primarily of poorly drained upland soils underlain by a hard fragipan and frequently flooded bottom lands (Schwegman 1973). Possibly two major land-use practices in southern Illinois may contribute to improvements in the quality of badger habitat. A substantial increase in row crop acreages has resulted from improved drainage and intrusion into previously forested lands. Jones et al. (1983) declared badgers to be denizens of both grasslands and forest edge. Extensive coal surface-mining has disrupted the fragipan, created relief in an otherwise flat topography, and produced large expanses of both temporary and permanent grassy areas. Both practices result in soils more suitable for burrows and habitat capable of supporting large numbers of rodents. According to Mumford and Whitaker (1982) there has been similar southward spread of the badger and other prairie species in Indiana. They report badger habitat that includes disturbed lands such as railroad rights-of-way, hay fields, and abandoned gravel pits. Possibly man's activities have created more favorable habitat in southern Illinois and facilitated establishment of badgers in recent years.

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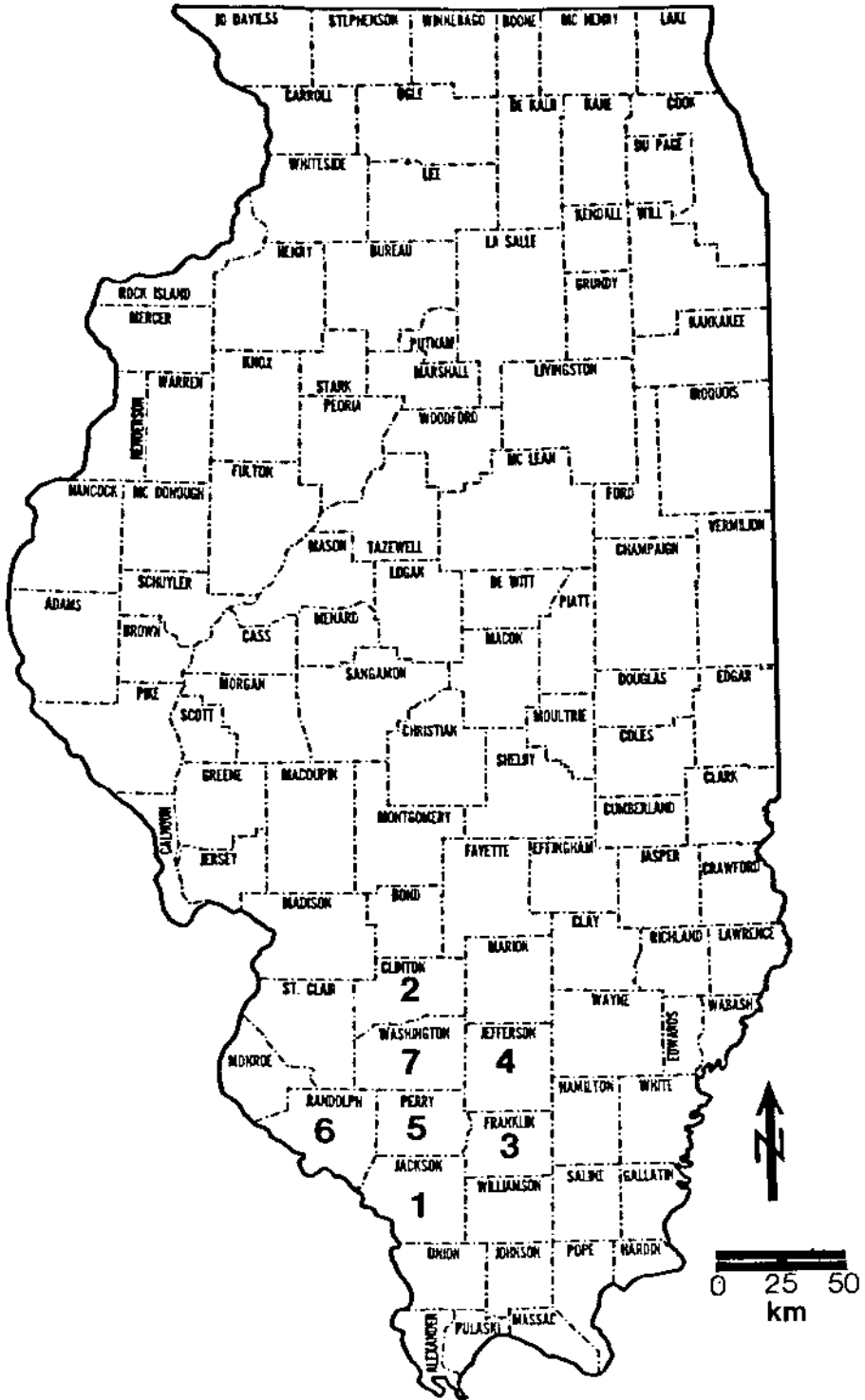


Fig. 1. Documented occurrences of badgers in southern Illinois 1979-1984.