

that is the principle source of natural nesting cavities.

Kestrels readily nest in wooden nest boxes and in the late 1970's and 1980's nest box projects were initiated in many areas on the continent. These projects were in a large part initiated and conducted by amateur naturalists. These efforts directly contributed to halting the decline in kestrel numbers and continue to be a simple and effective habitat management technique for this raptor. Building and erecting nest boxes along with banding the kestrels provides public education opportunities as well as augmenting existing non-game wildlife management programs implemented by government agencies.

In 1991, thirty-one nest boxes were constructed and erected in Queens County, Prince Edward Island. A total of nine nest boxes were used for nesting by kestrels comprising eight separate pairs of birds. One pair nested in two different boxes. The table below summarizes the key aspects of the breeding attempts and the apparent success of the nine occupied nest boxes in 1992.

Nest Box	Date of Laying	Clutch Size	Eggs Hatched	Number Banded
3	May 19	4	a	0
4	May 16	5	5	3
8	May 2	4	2	0
11	May 18	4	4	1
17	May 22	4	4	2
19	May 17	3	0	0
22	May 15	5	5	2
27	June 24	3	0	0
31	May 16	4	4	4

"a" Entire clutch missing. Kestrels aren't typically known to remove unhatched eggs therefore the nest may have been predated by a raccoon or eggs removed by a human.

Estimated date for laying first egg. Actual date may be +/- a day

Other species occupying nest boxes included European Starling (*Sturnus vulgaris*), Tree Swallow (*Iridoprocne bicolor*) and Common Grackle (*Quiscalus quiscula*). Two adult female kestrels and twelve nestlings (6 female and 6 male) were banded and one previously banded female was found occupying one nest.

The first year of this project yielded better than expected results in terms of nest box occupancy by kestrels. Approximately 30% of the nest boxes erected were used by kestrels and this far exceeded expectations based on previous experience. The potential exists for this project to yield benefits both in terms of scientific data gathering from banding as well as educational and public interest benefits in non-game wildlife species on the Island. An unexpected result was the occupancy of one nest box by a female kestrel already banded during the fall of 1991 in Connecticut, USA. Also the occupancy of a nest box by a pair of Common Grackles was the first known to this author in almost 20 years of maintaining nest boxes for kestrels.

The overall productivity of kestrels in 1992 was considered extremely low. The persistence of cold, wet weather well into July was thought to be the major factor influencing this low productivity. Adverse weather conditions may also have contributed to low productivity noted in a Canadian Wildlife Service nest box study of Tree Swallows on Prince Edward Island in 1992 as well as kestrel nest box projects in southern Ontario. Apart from the poor overall productivity, the first year of this project was considered a success.

Banding was conducted under Master Banding Permit # 10465 and authorization from the P.E.I. Department of the Environment. A presentation on this project was given to the Atlantic Society of Fish and Wildlife Biologists 27th Annual Meeting at Mill River, P.E.I. on September 24, 1992. A preliminary article was provided in issue # 123, page 6 of the Island Naturalist.