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FIRST NORTH AMERICAN REPORT OF AN AMERICAN KESTREL (Falco sparverius) ROOSTING IN A MONK PARAKEET (Myiopsitta monachus) NEST

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The Monk Parakeet (Myiopsitta monachus) is Florida's most common and conspicuous parrot; particularly widespread in urban and suburban environments (Pranty et al. 2006). In parts of Florida such as Broward County, they may outnumber all other parrots combined (Pranty and Epps 2002). It is the only parrot that does not nest in natural tree cavities, instead building large stick nests with many internal chambers, often compared to an apartment building (Goodfellow 2011). A survey of over 1000 Monk Parakeet nests in Florida found 50% were built on manmade structures, 39% on exotic trees, and 9% on native trees (Pranty 2009). Each cavity is unconnected, and empty chambers are sometimes occupied by other species. In this way, the Monk Parakeet creates a nest web, transforming resources for secondary cavity-nesters, similar to woodpeckers. These secondary nesters include perching birds like the White Monjita (Xolmis irupero), Screaming Cowbird (Molothrus rufoaxillaris), baywings (Agelaioides spp.), Guira Cuckoo (Guira guira), and Rock Dove (Columba livia), ducks such as Brazilian Teal (Amazonetta brasiliensis), and falcons such as the American Kestrel (Falco sparverius) and Spot-winged Falconet (Spizapteryx circumcincta) (Port and Brewer 2004, Nores 2009, Goodfellow 2011). The American Kestrel's range extends into South America, where it overlaps with the native range of Monk Parakeets. The American Kestrel is a widespread breeding resident in South America, except for the rainforests of the Amazon region. The Monk Parakeet's native range is more restricted, occurring primarily south of the Amazon. In Argentina, where both species are native, American Kestrels are periodically observed usurping Monk Parakeet nest cavities (de Lucca 1992).I began observing a group of Monk Parakeet nests in Miami, Florida at the start of February 2016. All birds were nesting on light towers surrounding an athletic complex at Florida International University. I found large stick nests on eight out of 12 towers surrounding the complex, each with one or two separate stick nests. On 8 February 8 I observed an American Kestrel, perching above the nests atop the towers. This kestrel was observed minutes later atop a different tower. The following day, I returned before dusk to observe parakeets returning to roost. I observed the kestrel fly to a tower with two unconnected parakeet nest piles, each with one visible cavity entrance. It briefly entered the lower nest, exiting about one minute later, and subsequently entered the upper nest, which it did not exit before sundown. Both nests on this tower were unusually quiet while the kestrel was present. The American Kestrel was observed in the same area for the next seven weeks, primarily perched and foraging. This bird's favorite perch was netting at the edge of the baseball field, from which it foraged on the wing for flying insects. On another dusk survey on 16 March, the kestrel again was observed returning to and roosting in the same nest.

I considered the possibility that this kestrel belonged to the rare subspecies Southeastern American Kestrel (*Falco sparverius paulus*). Most kestrels found in Florida are wintering migrants, members of the nominate race (*F. s. sparverius*) (Bohall-Wood and Collopy 1986). The Southeastern American Kestrel has been declining for decades,

Notes

and is listed as a threatened species by the State of Florida (Florida Natural Areas Inventory 2001). *F. s. paulus* was extirpated from Miami-Dade County around 1940, and from the 1940's through the 1980's, declined 82% in north-central Florida (Hoffman and Collopy 1988). If this were the rare subspecies, it would be the first nest in the region in decades. The kestrel was last seen 1 April. and I cannot assume it was the threatened subspecies. This is the first account of an American Kestrel using a Monk Parakeet nest in North America. While the American Kestrel was present, Monk Parakeets maintained a presence at the nest, but recorded activity was low, with no nest building observed. Following the kestrel's departure, nest activity appears to have resumed a normal pace. The Monk Parakeets were never seen attempting to chase away the kestrel, although I repeatedly observed parakeets at several nests chase away European Starlings (*Sturnus vulgaris*).

As Monk Parakeets have established populations north of Florida, this creates an interesting opportunity for American Kestrels. Monk Parakeets are urban adapted birds, thriving in human-dominated landscapes. Kestrels often forage in urban and suburban areas, but could be limited by a shortage of nest sites. Evidence suggests American Kestrels may be more flexible experimenting with unfamiliar nest and roost substrates. Kestrels lay pigmented eggs, while most cavity-nesting birds lay white eggs, suggesting they may have only recently adapted to cavity nests (Richards 1970). They are willing to explore novel roosts, as 85% of wintering birds in Louisiana and 68% of wintering birds in Pennsylvania used man-made substrates (Ardia 2001, Doody 1994). The Monk Parakeet nests represent a novel resource in urban North America, providing nests and roosts for kestrels, or other secondary-cavity nesters.

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LITERATURE CITED

- ARDIA, D. R. 2001. Winter roosting behavior of American Kestrels. Journal of Raptor Research 35:58-61.
- BOHALL-WOOD, P., AND M. W. COLLOPY. 1986. Abundance and habitat selection of two American Kestrel subspecies in North-Central Florida. Auk 103:557-563.
- Doody, J. S. 1994. Winter roost-site use by female American Kestrels (*Falco sparverius*) in Louisiana. Journal of Raptor Research 28:9-12.
- FLORIDA NATURAL AREAS INVENTORY. 2001. Southeastern American Kestrel, Falco sparverius paulus.
- GoodFellow, P. 2011. Avian Architecture: How Birds Design, Engineer, and Build. Princeton University Press, Princeton, New Jersey.
- HOFFMAN, M. L., AND M. W. COLLOPY. 1988. Historical status of the American Kestrel (*Falco sparverius paulus*) in Florida. Wilson Bulletin 100:91-107.
- DE LUCCA, E. R. 1992. Nidificación del halconcito colorado (*Falco sparverius*) en nidos de cotorra (*Myiopsitta monachus*). Hornero 13:238-240.
- MCCOMB, W. C., S. A. BONNEY, R. M. SHEFFIELD, AND N. D. COST. 1986. Snag Resources in Florida: Are They Sufficient for Average Populations of Primary Cavity-Nesters? Wildlife Society Bulletin 14:40–48.
- MILLER, K. E. 2010. Nest-site limitation of secondary cavity-nesting birds in even-age southern pine forests. Wilson Journal of Ornithology 122:126–134.
- Nores, M. 2009. Use of active Monk Parakeet nests by Common Pigeons and response by the host. Wilson Journal of Ornithology 121:812-815.

- PORT, J. L., AND G. L. BREWER. 2004. Use of Monk Parakeet (*Myiopsitta monachus*) nests by Speckled Teal (*Anas flavirostris*) in eastern Argentina. Ornitología Neotropical 15:209-218.
- PRANTY, B. 2009. Nesting substrates of monk parakeets (*Myiopsitta monachus*) in Florida. Florida Field Naturalist 37:51-57.
- PRANTY, B., AND S. A. EPPS. 2002. Distribution, population status, and documentation of exotic parrots in Broward County, Florida. Florida Field Naturalist 30:111-150.
- PRANTY, B., K. A. RADAMAKER, AND G. KENNEDY. 2006. Birds of Florida. Lone Pine Publishing, Auburn, Washington.
- RICHARDS, G. L. 1970. American Kestrel, *Falco sparverius*, exhibits relic nest building behavior. Condor 72:476.