ainfall in June and July was somewhat above normal, as were the temperatures. Nesting waterbirds are always in a precarious situation in Florida, and this summer was no exception. Rich Paul reports that two major colonies in Tampa Bay, containing about 3000 pairs each, were abandoned this year due to raccoon predation: Audubon's Washburn Sanctuary and Tarpon Key N.W.R. The raccoons have been removed from Washburn but remain on Tarpon Key as of this writing. As seems to always occur in Florida in the summer, either few people were out, or few people chose to send in reports, leaving the state with spotty coverage for the season.

Abbreviations/definitions: report (any observation); record (only those reports verifiable from photograph, videotape, or specimen evidence); R.A. (Restoration Area).

GREBES THROUGH SPOONBILLS

A Pied-billed Grebe was at Summerland Key, Monroe 5 Jun (JB, SS). Finding pelagic species off the coast of Florida can be difficult, so this summer's array of species is quite impressive. On 13 Jun in the Florida Current off Key Biscayne, Miami-Dade, Bithorn found one Greater, 3 Corv's, and 8 Audubon's Shearwaters along with 10 Wilson's and 2 Band-rumped Storm-Petrels. A trip to Marathon Hump, 37 km off Marathon, Monroe 26 Jun located a Cory's and 40+ Audubon's Shearwaters, along with a Band-rumped and 5 Wilson's Storm-Petrels (LM et al.). Two Cory's Shearwaters were found off Key Biscayne, Miami-Dade 24 Jul (RD). A single Wilson's Storm-Petrel was 24 km off Hillsboro Inlet, Broward 10 Jul (MB). Farther n., a trip out of Ft. Pierce Inlet off Brevard, Indian River, and St. Lucie up to 73 km offshore 3 Jul found single Cory's and Greater Shearwaters and 4 Wilson's Storm-Petrel's (EH, PH). A trip out of Ponce Inlet, Volusia 22 Jul 160 km offshore found 23 Cory's and 7 Audubon's Shearwaters and 2 Wilson's and 1 Leach's Storm-Petrels (IP). An impressive 1629 Magnificent Frigatebirds were counted 10 Jul at ABC I. off Marco 1., Collier (TB et al.). On a more negative note, frigatebirds have abandoned their long-time roost on Tarpon Key in Tampa Bay, likely due to the above-noted raccoon predation (RP).

For the 2nd consecutive year, mid-summer American Bitterns were found at Orlando Wetlands Park, *Orange* 19 Jun (CP), and up to 3, including a juv. (HR), were at Lake Apopka R.A. throughout the period. Also for the 2nd consecutive year, a Least Bittern was found 22 Jul at Ten Thousand Islands N.W.R., *Collier* (TD). Two juv. Great White Herons were well n. of normal at St.

Florida



Marks N.W.R., Wakulla 26 Jun (TC), as was a single bird 14 Jun at Huguenot Memorial Park, Duval (BR). Reddish Egrets nested successfully at Three Rooker I., Pinellas for the 2nd consecutive year (RP, MK); a juv. was inland at Lake Placid, Highlands 30 Jun (RP). While White Ibis numbers were down compared to their huge year in 2003, when the colony at the Alafia Bank, Hillsborough "borrowed" about 10,000 pairs from the Everglades, overall numbers were still good (RP). With the recent decline of Roseate Spoonbills in Florida Bay, the colony at Alafia Bank, Hillsborough, which contained 320 pairs this year, is now the largest in Florida (RP).

WATERFOWL THROUGH SHOREBIRDS

Black-bellied Whistling-Ducks continue to expand their range, with up to 20 in Leon into Jul (MR), 25 at Lake Apopka R.A. 6 Jun (HR), 15 at the Polk phosphate mines 4 Jul (PT, CG), 5 at Orlando Wetlands Park 19 Jun (CP), and up to 40 at Viera, Brevard 6–30 Jul (DF). Fulvous Whistling-Ducks

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have become harder to find, with the only reports coming from Lake Apopka R.A., where a peak of 20 was counted 9 Jun (HR). Summering ducks were scarce this summer: Blue-winged Teal reports came from four locations, and 2 male Lesser Scaup were at Springhill W.T.P., Leon (GM). Eighteen Turkey Vultures in heavy molt were at Garden Key, Dry Tortugas N.P. 19 Jun (DS et al.). Hundreds of Swallow-tailed Kites were at Lake Apopka R.A. in Jul, with a peak of 475 on 21 Jul (HR). Mississippi Kites nested for the first time in Duval, with a pair incubating for about three weeks in s. Jacksonville (RS et al.). Cooper's Hawks have been increasing as nesting birds throughout cen. and s. Florida, but this summer's reports from 10 locations in the West Palm Beach-to-Miami urban corridor is quite impressive. Short-tailed Hawks were reported from four locations in mid-peninsular Florida, about average for this scarce species. While not uncommon in the prairies of cen. Florida, 42 Crested Caracaras in one pasture in *St. Lucie* 30 Jun (SC) was impressive. American Kestrels are scarce in Florida in the summer, so reports from four locations were about average.

Three Black Rails were heard 13 Jun and 5 were heard 25 Jul at Werner-Boyce Salt Springs S.P., Pasco (RSm), a recently discovered population. Purple Gallinules bred in both Hillsborough (RP) and Pinellas (JF), where they are quite uncommon. The peak count of Purple Galinules at Lake Apopka R.A. was 49 on 2 Jul (HR). An American Golden-Plover was at Crandon Beach, Miami-Dade 22 Jul (RD). Leary found 109 Wilson's Plovers on Big Bird I., Nassau 9 Jul. A colorbanded ad. Piping Plover, originally banded in 2000 in the Great

Lakes, made a return appearance at Bird Is., Nassau 9 Jul (PL). A Piping Plover 22 Jul at Crandon Beach was fairly early for that location (RD). Black-necked Stilts nested successfully for the first time in w. Pasco at Trinity (KT). American Oystercatchers nesting in Hillsborough Bay, Hillsborough and the Barge Canal spoil islands, Citrus are now believed to be declining due to erosion of island shorelines, although disturbance remains a factor. A number of pairs are now actually nesting under trees (mangroves, Brazilian Pepper, Australian Pine) in apparent response to beach loss (RP, MK et al.). Up to 12 imm. American Oystercatchers summered at Little Estero Lagoon, Lee, including an individual banded as a chick in Massachusetts (CE). An impressive 211 American Avocets were at the Polk phosphate mines 4 Jul (PT, CG). Two American Avocets were at West L., Everglades N.P. 13 Jun (SS), and 9 were at Snake Bight, Everglades N.P. 3 Jul (BR).

The first returning Greater Yellowlegs was 6 Jul at Viera, *Brevard* (DF), and the first Lesser Yellowlegs were 35 on 4 Jul at *Polk* phosphate mines (PT, CG). Single Solitary Sandpipers were at Springhill W.T.P., *Leon* 19 Jul (GM), Lake Apopka R.A.

24 Jul (HR), and in mid-Pinellas 24 Jul (JF). A Spotted Sandpiper was at Snake Bight, Everglades N.P. 3 Jul (BR). An Upland Sandpiper was e. of Nine Mile Bend, Palm Beach 25 Jul (BM). More Whimbrels than normal were reported, with reports from Duval, Hillsborough, Lee, Pasco, Pinellas, and Wakulla. Single Long-billed Curlews were at Little Estero Lagoon, Lee 1–23 Jun (CE) and Big Bird I. 22 Jul (PL). Six to 8 Ruddy Turnstones and 3–4 Sanderlings summered at Crandon Beach (RD). The



Black-bellied Whistling-Ducks are expanding rapidly in the central peninsula of Florida. These adults were photographed at Viera Wetlands, Brevard County on 18 July 2004. Photograph by David Freeland.

first southbound Semipalmated Sandpiper was 15 Jul at Springhill W.T.P., Leon (GM), and the first Western Sandpipers were at Lake Apopka R.A. 24 Jul (HR). The first returning Least Sandpipers were 15 at the Polk phosphate mines 4 Jul (PT, CG). Three White-rumped Sandpipers at Viera 3 Jun (DS et al.) were the only ones reported. Berney found 42 Pectoral Sandpipers 25 Jul at Browns Farm Road, Palm Beach. Single alternate-plumaged Curlew Sandpipers were seen and photographed at Ft. De Soto Park, Pinellas 10 Jul (BH) and Talbot Islands S.P. 17 Jul (PL). Four Red Knots apparently summered at Little Estero Lagoon, with 2 southbound birds there 24 Jul (CE). Short-billed Dowitchers lingered at Little Estero Lagoon until 23 Jun (CE). Single female Wilson's Phalaropes in alternate plumage were found 3 Jun at Merritt Island N.W.R. (DS et al.) and e. of Seven Springs, Pasco 28 Jun (KT).

Leary reported an impressive 10,000+ larids at Nassau Sound 22 Jul. One Great Black-backed and 2–3 Lesser Black-backed Gulls summered at Crandon Beach (RD). Florida's first Heermann's Gull put in yet another appearance when it returned to Ft. De Soto Park 15 Jul (fide LA). This bird

initially showed up in Oct 2000 and has been returning at various times since then. Four Gull-billed Terns were at the Polk phosphate mines 4 Jul (PT, GC). Twenty pairs bred on Hillsborough Bay, Hillsborough this season (AP, RP). Royal Tern numbers in Florida hit probably a 120+ year high, with nearly 4000 pairs nesting in Tampa Bay alone (RP). Seventy-eight Common Terns at Three Rooker I. 25 Jun (MK) was an unusually large number for summer. Forster's Terns do not breed in Florida, so 352 at the Polk phosphate mines 4 Jul (PT, GC) was an impressive number. Ten Roseate Terns were seen 25 Jun at a well-reported colony at the Marathon Government Center, Monroe (TD, DS, CE). Least Terns had a very successful season at Little Estero Lagoon, Lee, with 300 birds, including about 150 juvs., present 31 Jul (CE). As their beach habitat is less available, Least Terns have taken to nesting on rooftops. Freeland found 30+ pairs on a rooftop in Melbourne, Brevard 8 Jul. Thirty-six Bridled Terns and 40+ Sooty Terns were seen on a pelagic trip to Marathon Hump, Monroe 26 Jun (LM et al.). Three Bridled and 750+ Sooty Terns were seen 160 km e. of Ponce Inlet, Volusia 22 Jul (JP). Two Sooty Terns were seen off Hillsboro Inlet, Broward 10 Jul (MB). Returning Black Terns were seen 25 Jun at Three Rooker I. (MK) and St. Petersburg, Pinellas (RoS). But in which direction was the alternate-plumaged individual found 8 Jun at Gullivan Bay, Ten Thousand Islands N.W.R. (TD) going? Five pairs of Black Skimmers nesting on a rooftop were noted in Melbourne, Brevard 8 Jul (DF). At a more traditional beach nesting location, 75 chicks hatched at Big Bird I. 22 Jul (PL).

DOVES THROUGH FINCHES

Twenty-five White-crowned Pigeons at Southern Glades Wildlife and Environmental Area, Miami-Dade 10 Jun (RD) was a high number away from the Keys. A Yellowbilled Cuckoo was at Garden Key, Dry Tortugas N.P. 20 Jun (DS et al.). Seven Antillean Nighthawks at the Marathon Airport, Monroe 25 Jun (DS, TD, CE) were to be expected at what might be the easiest place to see this species in the United States, but one at Frog Pond W.M.A., Miami-Dade 12 Jun (RD) was unexpected, as this species is rare on the mainland. A female Belted Kingfisher at Largo, Pinellas 26 Jun (KN) was either summering or very early. Scissor-tailed Flycatchers are regular winter residents, but one at Flamingo, Everglades N.P. 18 Jun-3 Jul (BM, BR) was quite unusual. Even more unusual was a Fork-tailed Flycatcher 23-31 Jul at St. Petersburg, Pinellas (LA et al.). An impressive 2850 Purple

Martins were at Lake Apopka R.A. 20 Jun, with 2180 still there 23 Jun (HR). Single Cliff Swallows were at Lake Apopka R.A. 4 & 18 Jul (HR). Barn Swallows are a scarce but increasing breeder in Florida, so the presence of 40+ on each of the 17 dates that Robinson censused Lake Apopka R.A. is

particularly noteworthy, as were the 290 he recorded on 24 Jul. Also of note was a Barn Swallow at Garden Key, Dry Tortugas N.P. 19 Jun (DS et al.).

Singing male Wood Thrushes were recorded at eight sites in Leon during the season (GM). American Robins are very scarce in Florida during the summer, so three reports from Leon, with a juv. at Springhill Road W.T.P. (GM), were notable, if not unexpected. Totally unexpected was the singing robin 11-12 Jun at Home-Miami-Dade stead, (LM). Out-of-season

Gray Catbirds were at Boyd Hill Nature Trail, St. Petersburg 2 Jun (RoS) and Matheson Hammock, Miami–Dade 13 Jun (DS). Common Mynas are increasing in Florida. Their center of abundance has been the Homestead area, but they have now spread throughout the Keys, becoming much more common in the past year (JB). The status of this species is uncertain, as they have not been sufficiently monitored to determine breeding success and population size.

(They are certainly more common than Red-whiskered Bulbul and Spot-breasted Oriole, two species already on the official list for Florida.) A Black-and-white Warbler 12 Jul at Key Largo, *Monroe* (BMu) and a Yellow-throated Warbler at Miami Shores 11 Jul (AH) were both early. A Yellow War-



Two Curlew Sandpipers were found in Florida in July 2004. The first was at Fort De Soto Park, Pinellas County 10 July, the second at Talbot Islands State Park, Duval County 17 July (here). Photograph by Patrick Leary.

bler fluttering around a boat ca. 57 km ne. of Ft. Pierce Inlet 3 Jul (EH, PH) was slightly early as a migrant. The first returning Yellow Warbler was at Lake Apopka R.A. on 18 Jul, while a late northbound American Redstart was there 2 Jun (HR). An impressive 32 Yellow-breasted Chats were at Lake Apopka R.A. 2 Jun (HR).

Three Chipping Sparrows were s. of normal at Avon Park, Highlands for most of Jun (AB). A juv. Lark Sparrow was at Hugh

Taylor Birch S.P., Broward 31 Jul (MB). Blue Grosbeaks and Indigo and Painted Buntings were present throughout the season at Lake Apopka R.A., with max counts of 33, 49, and 6 respectively (HR). Robinson had up to 3 Dickcissels at Lake Apopka R.A. 2 Jun-4 Jul. As is normal, blackbird numbers increased as the season progressed, but 182,000 Red-winged Blackbirds and 97,000 Boat-tailed Grackles at Lake Apopka R.A. in late Jul (HR) were truly impressive counts. Shiny Cowbirds were reported from Flamingo, Everglades N.P. 8 Jun (B&LC) and Alligator Pt., Franklin 11-17 Jul (JM). Bronzed Cowbirds seem to be increasing in Florida in the summer, with reports of summering birds from three locations in Miami-Dade and one in Collier. An alternate-plumaged male American Goldfinch was at Altamonte Springs, Seminole 14 Jun (PHu).

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State of the Region

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Bounded on three sides by ocean, sea, and gulf, Florida has long been recognized as a "prolific reservoir of biological diversity" (Fitzpatrick 1991). The state supports 81 natural communities, including some of the most diverse forests and grasslands in North America. Overall, Florida supports over 3600 native plants and 700 native vertebrates, with 8% and 17% of these, respectively, endemic. Florida's avifauna (479 native species) is the largest of any state east of the Mississippi River and includes one endemic species and several endemic subspecies. In the past 100 years, the state has lost the Passenger Pigeon, Carolina Parakeet, Ivory-billed Woodpecker, Bachman's Warbler, and Dusky Seaside Sparrow. Currently, 66 other taxa are considered endangered, threatened, rare, of special concern, or of undetermined status (Rodgers et al. 1996). Recent well-publicized conservation initiatives in Florida such as the restoration of the Everglades and the Kissimmee River and the reintroduction of Whooping Cranes have overshadowed the needs of numerous other taxa, for which in many cases even basic biological data are lacking. Because all of Florida's terrestrial and wetland habitats are under siege, it is difficult to rank conservation priorities (see box below), and the relevant NABCI Bird Conservation Regions—BCR 31 (Peninsular Florida) and BCR 27 (Southeastern Coastal Plain, for



This Dusky Seaside Sparrow photographed at Merritt Island National Wildlife Refuge, Florida was one of the last of its kind. In the Everglades, the endemic Cape Sable Seaside Sparrow, a very distinctive taxon also formerly (and potentially again to be) considered a separate species, maintains a toehold, but its habitat is threatened by changes in hydrology and plant communities, severe hurricanes, and sea-level rise. Photograph by Paul W. Sykes, Jr./VIREO.

northern Florida and the Panhandle) do not shed much light on the complexity of ecoregions, especially subtropical habitats, in the state. By way of an overview, five important phenomena affecting Florida birdlife and bird conservation are considered in brief here.

Land protection • Florida gains one million residents every three to four years, a rate of 700-900 residents/day. The population increased from 2.7 million residents in 1950 to 15.9 million in 2000. Approximately 165,000 acres of habitat annually—19 acres per hour—are destroyed to accommodate the expanding human population. This growth has reduced cutthroatgrass seeps by 99%, Miami pine rocklands by 98%, Longleaf Pine flatwoods by 97%, unimpounded Brevard County salt marshes by 95%, Lake Wales Ridge scrub by 85%, Florida dry prairie by 81%, and Everglades marshland by 65%. The massive reduction of these habitats makes the remaining fragments all the more vulnerable to damage by landfalling tropical cyclones and other unpredictable events. Noss and Peters (1995) ranked Florida as the most ecologically endangered state in the Union—the only state to earn "extreme" ratings for every category measured (overall risk, ecosystem risk, species risk, development risk, development status, and development trend), and Florida contained the most endangered ecosystems (nine). To counteract such massive losses of native flora and fauna, Florida has led the nation in public-land acquisition. Between 1964 and 2000, over \$3.7 billion was spent to protect 4.7 million acres of land. Florida's current primary land-acquisition program, Preservation 2000, will commit an additional \$3 billion through 2009. Currently, over 9.27 million acres of land—more than 27% of the state—is publicly owned or under perpetual conservation easement, and this amount increases by more than 200,000 acres each year (Jue et al. 2001, FDEP 2004).

Exotic species • Like other subtropical areas, developed parts of Florida have been land-scaped with vegetation native to many parts of the world. Most species are benign, but 67 forms are ranked by the Florida Exotic Plant Pest Council as Category I invasive species that have invaded and disrupted native communities (FLEPPC 2004). Exotic animals are also generally benign, but there are exceptions. Among the 200+ species of exotic birds reported from Florida, few are impacting native species (Pranty 2004). Perhaps the greatest danger is posed by feral Mallards, which are (increasingly?) hybridizing with Mottled Ducks. Moorman and Gray (1994) warned that "if no preventative management action [against feral Mallards] is taken, the Mottled Duck as a discreet entity has a questionable future." Simberloff et al. (1997) is a good source for the issues concerning Florida's exotic flora and fauna.

Cowbird brood parasitism • Although not a major concern presently, brood parasitism by Brown-headed Cowbirds bears watching. Local declines in populations of Black-whiskered Vireos and Florida Prairie Warblers along the central Gulf Coast and of Painted Buntings along the northern Atlantic Coast have been blamed on cowbird brood parasitism. Bronzed Cowbirds are increasing and seemed poised to begin breeding in Florida (in fact, observations during summer 2004 suggest that it is already occurring), but Shiny Cowbirds remain rare in the state, with breeding not yet documented.

Sea-level rise • Given the slight topographic relief of Florida (its highest point is 345 feet above mean sea level), the effects of rising seas could be devastating. Emslie (1996) documented that a one-meter rise would inundate 5.8% of the peninsula; an increase of 10 m would eliminate 53%. Recently, Williams et al. (1999) documented a replacement of coastal hydric hammocks by salt marsh at Waccasassa Bay, Levy County, during 1992—1995. They attributed forest loss to increased soil salinity as a result of a mean sea level rise of 1.5 mm/year between 1939 and 1994. A warming ocean is also expected to produce more frequent and stronger hurricanes; Florida habitats were severely damaged by *Charley, Frances, Ivan*, and *Jeanne* in 2004.

West Nile Virus (WNV) • The documented impacts of WNV on corvids elsewhere in the United States created alarm in Florida for its endemic corvid—the Florida Scrub-Jay. Scrub-jay populations have decreased an estimated 90% in the past 100 years due to loss and fragmentation of habitat and fire exclusion. However, the effects of WNV in Florida seem minor, perhaps because the abundance of mosquitoes in the state may have allowed animals to have built up a natural resistance or immunity against some mosquito-borne diseases such as WNV (Reed Bowman, pers. comm.). However, continued monitoring of WNV in Florida certainly is warranted.

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Literature cited

Emslie, S. D. 1996. Avian Community, Climate, and Sea-Level Changes in the Plio-Pleistocene of the Florida Peninsula. Ornithological Monograph No. 50. American Ornithologists' Union. Washington, D.C.

FDEP. 2004. Preservation 2000/Florida Forever website http://www.dep.state.fl.us/lands/acquisition/p2000. Florida Department of Environmental Protection. Tallahassee, FL. Accessed 29 September 2004.

Fitzpatrick, J. W. 1991. Foreword. Pages vii—ix in *Florida Bird Records in American Birds and*Audubon Field Notes *1947—1989* (R.W. Loftin, G.E. Woolfenden, and J.A. Woolfenden).

Special Publication No. 4, Florida Ornithological Society. Gainesville, Florida.

FLEPPC. Florida Exotic Pest Plant Council website http://www.fleppc.org. Accessed 30 September 2004.

Jue, S, C. Kindell, and J. Wojcik. 2001. Florida Conservation Lands 2001. Florida Natural Areas Inventory. Tallahassee, Florida.

Moorman, T.E., and P.N. Gray. 1994. Mottled Duck (Anas fulvigula). In The Birds of North America, No. 81 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia; The American Ornithologists' Union, Washington, DC.

Noss, R. F., and R. L. Peters. 1995. Endangered Ecosystems: A Status Report on America's Vanishing Habitat and Wildlife. Defenders of Wildlife. Washington, DC.

Pranty, B. 2004. Florida's exotic avifauna: a preliminary checklist. *Birding* 36: 362–372. Rodgers, J.A., Jr., H.W. Kale, II, and H.T. Smith, eds. 1996. *Rare and Endangered Biota of*

Florida, Volume V, Birds. University Press of Florida. Gainesville, FL.

Simberloff, D., D. C. Schmitz, and T. C. Brown, eds. 1997. Strangers in Paradise: Impact and Management of Nonindigenous Species in Florida. Island Press. Washington, DC.

Williams, K., K. C. Ewel, R. P. Stumpf, F. E. Putz, and T. W. Workman. 1999. Sea level rise and coastal forest retreat on the west coast of Florida, USA. *Ecology* 80: 2045–2063.

The following bird taxa, grouped by habitat, are among those that are particularly deserving of increased management and/or research efforts:

Beach/dune species (Cuban Snowy Plover [Charadrius alexandrinus tenuirostris], Wilson's Plover, Piping Plover, American Oystercatcher, Roseate Tern, Least Tern, Black Skimmer, and other breeding or wintering larids). Threats: severe disturbance—many species have begun to nest on gravel rooftops, with variable success and unknown long-term consequences; continued oceanfront development; sea-level rise.

Saltmarsh species (Black Rail, Florida Clapper Rail [Rallus longirostris scottii], Mangrove Clapper Rail [R. l. insularum], Wayne's Clapper Rail [R. l. waynei], Marian's Marsh Wren [Cistothorus palustris marianae], Worthington's Marsh Wren [C. p. griseus], MacGillivray's Seaside Sparrow [Ammodramus maritimus macgillivraii], Scott's Seaside Sparrow [A. m. peninsulae). Threats: lack of basic demographic data for nearly all taxa; sea-level rise.

Freshwater marsh species (all wading birds, Snail Kite, Cape Sable Seaside Sparrow [Ammodramus maritimus mirabilis]). Threats: rookery/roost disturbance (wading birds); improper water regulation; mercury contamination (wading birds); nutrient-rich water discharged from sugar cane farms; exotic plants (Cape Sable Seaside Sparrow).

Mangrove-breeding species (wading birds, Mangrove Cuckoo, Gray Kingbird, Black-whiskered Vireo, Florida Prairie Warbler [Dendroica discolor paludicola], Cuban Golden Warbler [Dendroica petechia gundlachi])—disturbance (wading birds); raccoon depredation (wading birds); lack of basic data (upland species); potentially cowbird brood parasitism (upland species).

Dry-prairie species (White-tailed Kite, Crested Caracara, Florida Burrowing Owl [Athene cunicularia floridana], Florida Grasshopper Sparrow [Ammodramus savannarum floridanus], Bachman's Sparrow). Threats: habitat loss and fragmentation; adverse land-uses or management such as grazing and silviculture (Florida Burrowing Owl and Florida Grasshopper Sparrow); dormant-season fires (Florida Grasshopper Sparrow).

Longleaf-pine species (Southeastern American Kestrel [Falco sparverius paulus], Red-cockaded Woodpecker, Brown-headed Nuthatch, Bachman's Sparrow). Threats: severe habitat loss and fragmentation; fire suppression and dormant-season fires; intensive management needs (Red-cockaded Woodpecker).

Xeric oak-scrub species (Florida Scrub-Jay). Threats: habitat loss and fragmentation; fire exclusion; potentially West Nile virus.