

**AVON PARK AIR FORCE RANGE—BOMBING RANGE RIDGE**

**Avon Park Air Force Range** (106,110 acres; 42,444 ha) and the adjacent **Bombing Range Ridge CARL–FF Project** (39,073 acres [15,629 ha], with 4009 acres [1603 ha] acquired as the **Sumica/Lake Walk-In-The-Water Tract**)

Highlands and Polk counties

145,183 acres (58,073 ha), with 110,119 acres (44,047 ha) acquired

---

**LOCATION:** in southeastern Polk County and northeastern Highlands County about 10 miles (16 km) east of the town of Avon Park. The Bombing Range Ridge CARL–FF Project lies north of the Air Force Range, extending north along the western shore of Lake Kissimmee to Lake Kissimmee State Park and west to Lake Weohyakapka between Fedhaven and Indian Lake Estates. Contiguous with parts of the Lake Wales Ridge IBA to the west, the Lake Kissimmee Lake and River IBA to the east, and is across the Kissimmee River from the Kissimmee Prairie IBA.

**DESCRIPTION:** **Avon Park Air Force Range** is a large, active military range used by the U.S. Air Force and the National Guard for bombing and gunnery practice, frequently using live ammunition. A state prison, juvenile detention facility, and numerous other buildings are located onsite. A majority of the Range remains in natural habitats, although 19,728 acres (7891 ha; 19%) were converted to pine plantations in the 1960s, and 2,199 acres (879 ha) are developed. Lake Arbuckle and Arbuckle Creek form the western boundary, while the Kissimmee River forms the eastern boundary. The Range receives \_\_\_ recreationists and \_\_\_ hunters annually. The **Bombing Range Ridge CARL–FF Project** encompasses a large, diverse area that is mostly undisturbed, although several hunting cabins and other dwellings exist; virtually no avian data are available presently. Because the CARL-FF Project is largely unacquired, data for this IBA are virtually limited to Avon Park Air Force Range.

**OWNERSHIP:** U.S. Air Force (Avon Park Air Force Range), South Florida Water Management District and Polk County (Sumica Lake Walk-In-The-Water Tract), and private owners (remaining acreage of the Bombing Range Ridge CARL–FF Project; Florida Division of Forestry will be the owner if the site is publicly acquired)

**HABITATS:** \*longleaf pine flatwoods, \*slash pine plantation, \*temperate hammock, \*xeric oak scrub, \*dry prairie, \*freshwater marsh, sand pine scrub, sandhills, non-native pasture, agricultural fields, cypress swamp, bayhead, cattail marsh, sawgrass marsh, riverine, lacustrine, artificial

**LAND USE:** **Avon Park Air Force Range:** \*bombing and gunnery practice, \*conservation, \*timber production, recreation, hunting, cattle grazing, state prison and juvenile detention facility. **Bombing Range Ridge CARL–FF Project:** \*private property, \*conservation, \*hunting, weekend residences

**IBA CATEGORIES:** significant populations of Endangered, Threatened, Special Concern, FCREPA, and Watch List species; complete diversity of longleaf pine flatwoods and dry prairie species; significant natural habitats; and long-term research

**AVIAN DATA:** Avon Park Air Force Range is extremely important for three Endangered or Threatened species: the Red-cockaded Woodpecker, Florida Scrub-Jay, and “Florida” Grasshopper Sparrow, and supports numerous other listed species. The range also contains probably is one of the largest populations of Hairy Woodpeckers remaining in the southern half of the Peninsula. • Henslow’s Sparrows appear to be regular winter residents in the prairies. Not much is known about avian use of the Bombing Range Ridge CARL–FF Project, but it does support all species of longleaf pine flatwoods, including a significant population of Red-cockaded Woodpeckers, and a singing male “Florida” Grasshopper Sparrow was found in the southeastern section 15 May 1997 +(Delany et al. 1996b).

**Both sites combined:**

SPECIES	DATES	NUMBERS	COMMENTS
White Ibis	21 Dec 1993	1750 birds	(N)
	29 Dec 1996	2318 birds	(N)
Short-tailed Hawk		1 pair at least	<1% (B)
Red-shouldered Hawk	21 Dec 1993	124 birds	(R)
Crested Caracara	1998–1999	>2 pairs	1% (B)
Sandhill Crane (probably mostly “Greater” Sandhill Crane)	21 Dec 1993	360 birds	1% (W)
	29 Dec 1995	329 birds	1% (W)
Barred Owl	29 Dec 1994	71 birds	(R)
Hairy Woodpecker	29 Dec 1994	21 birds	(R)
Red-cockaded Woodpecker	2000	31 active clusters	2% (R)
Northern Flicker	29 Dec 1994	48 birds	(R)
Brown-headed Nuthatch	29 Dec 1994	145 birds	(R)
Florida Scrub-Jay	1991	100 groups	2% (R)
	2000	50 groups	1% (R)
Blue-gray Gnatcatcher	29 Dec 1994	412 birds	(W)
Pine Warbler	21 Dec 1993	1035 birds	Record North American CBC total
	29 Dec 1994	1021 birds	(R)
Common Yellowthroat	29 Dec 1994	345 birds	(R)
Eastern Towhee	21 Dec 1993	380 birds	(R)
Bachman's Sparrow	21 Dec 1993	50 birds	(R)
	29 Dec 1994	50 birds	(R)
“Florida” Grasshopper Sparrow	spring 1997	134 singing males	13% (R)
	spring 1998	108 singing males	10% (R)
	spring 1999	118 singing males	11% (R)
	spring 2000	81 singing males	8% (R)
	spring 2001	76 singing males	7% (R)
Swamp Sparrow	21 Dec 1993	155 birds	
Overall diversity	___ list	165 natives 3 exotics	Avon Park Air Force Range only

December sightings from various Avon Park Air Force Range CBCs, Short-tailed Hawk data observations by Bill Pranty (Audubon of Florida), woodpecker data from +Bowman et al. (1998a), scrub-jay data from +Bowman et al. (1998b), Grasshopper Sparrow data from +Delany et al. (1998, 1999a, b, 2000, and 2001)

**OTHER RESOURCES:** [Aren't there over 1000 species of native plants known from the Range?] A number of cultural sites are known Avon Park Air Force Range. Approximately 55% of the Range meet the standards of the Florida Natural Areas Inventory as “natural areas” +(Orzell 1997). Two Federally-listed plants occur onsite: ♦Florida jointweed (*Polygonella basiramia*) and ♦sweetscented pigeonwings (*Clitoria fragrans*). Half of the shoreline of Lake Arbuckle and over 12 miles (19.2 km) of frontage along the Kissimmee River are within the Air Force Range.

**THREATS: Avon Park Air Force Range:** \*habitat succession, human disturbance, exotic plants, feral hogs, cattle grazing, bombing and gunnery exercises. **Bombing Range Ridge CARL–FF Project:** \*development, \*timbering, human disturbance, exotic plants, feral hogs

**CONSERVATION ISSUES:** There are 20 active Red-cockaded Woodpecker clusters on the Range, and 11 on the adjacent Bombing Range Ridge CARL–FF Project. The birds are color-banded and monitored regularly, and the population is stable +(Bowman et al. 1998a). • The population of Florida Scrub-Jays on the Range has declined severely from over 100 groups in 1991 to about 50 in 2000 due to insufficient habitat restoration activities. Scrub-Jay dispersal is hampered by fire exclusion in native flatwoods, and conversion of flatwoods to pine plantations +(Bowman et al. 1998b). Individuals on the Range are color-banded and monitored regularly. • Three apparently separate populations of “Florida” Grasshopper Sparrows occur on the Range and all are declining. In particular the population

at Bravo Range has declined since its discovery in 1997 from 21 singing males +(Delany et al. 1999) to 4 singing males in 2001 +(Delany et al. 2001). Prairies in which “Florida” Grasshopper Sparrows breed are grazed for short periods during the sparrow breeding season; the effect of cattle on sparrow nests is unstudied. Prairies are burned on a three-year rotation, mostly during late winter or early spring to coincide with the calving season, and some areas are becoming too overgrown to support sparrows. Long-term effects of off-season fires on prairie flora and fauna deserves study. Bombing and gunnery practice do not appear to have a significant negative effect on “Florida” Grasshopper Sparrow populations, and in fact, the frequent ordnance-caused fires may have supported the persistence of the population at Echo Range. At least two areas (east of Durden Road and Wise Road) formerly occupied by “Florida” Grasshopper Sparrow in recent years now are vacant (M.F. Delany pers. comm.); the former site now is shrubby and the latter site is small and surrounded by pine plantations (B. Pranty pers. obs.). A large habitat modification experiment, resulting in the conversion of 510 acres (204 ha) of longleaf pine flatwoods to dry prairie was begun in 1998. This area, which is adjacent to the OQ Range–Delta Trail Area population, will be monitored to determine whether sparrows will colonize the site +(Delany et al. 2000). • Over 25,000 acres (10,000 ha) of the Air Force Range are prescribed-burned annually. The **Bombing Range Ridge CARL–FF Project** supports high-quality longleaf pine flatwoods, which are susceptible to clear-cutting for timber. The site is also in danger of residential development.

*Over 6500 acres (2600 ha) of high-quality longleaf pine flatwoods that extend west to County Road 630 are excluded from the CARL–FF Project boundary. Public acquisition of these properties should be investigated.*

**NOMINATED BY:** Bill Pranty (Audubon of Florida)

**REVIEWED BY:** Mike Delany (Florida Fish and Wildlife Conservation Commission)

**REFERENCES:** +Bowman, R., D.L. Leonard, L. Backus, P. Barber, A. Mains, L. Richman, and D. Swan. 1998a. Demography and habitat characteristics of the Red-cockaded Woodpecker at the Avon Park Air Force Range: Final report 1994–1998. Final report to U.S. Department of Defense, MacDill Air Force Base, Tampa, Florida. • +Bowman, R., N. Hamel, L.A. Riopelle, and S.P. Rowe. 1998b. Demography and habitat characteristics of Florida Scrub Jays at Avon Park Air Force Range: Final report 1994–1998. Final report to U.S. Department of Defense, MacDill Air Force Base, Tampa, Florida. • +Delany, M.F., D.W. Perkins, and B. Pranty. 1998. Florida Grasshopper Sparrow demography, Avon Park Air Force Range, 31 March 1997–31 March 1998. Final report submitted to Environmental Flight, Avon Park Air Force Range, FL. • +Delany, M.F., D.W. Perkins, and B. Pranty. 1999a. Florida Grasshopper Sparrow demography and habitat alteration, Avon Park Air Force Range, February 1998–February 1999. Annual report submitted to Environmental Flight, Avon Park Air Force Range, FL. • +Delany, M.F., P.B. Walsh, B. Pranty, and D.W. Perkins. 1999b. A previously unknown population of Florida Grasshopper Sparrows on Avon Park Air Force Range. *Florida Field Naturalist* 27: 52–56. • +Delany, M.F., B. Pranty, and H.W. Lovell. 2000. Florida Grasshopper Sparrow demography and habitat alteration, Avon Park Air Force Range, 1 February 1999–31 January 2000. Annual report submitted to Environmental Flight, Avon Park Air Force Range, FL. • +Delany, M.F., V. Rumancik, and J.O. Garcia. 2001. Population monitoring and habitat management of the Florida Grasshopper Sparrow at Avon Park Air Force Range, and regional habitat mapping and distribution. Second quarterly report to Avon Park Air Force Range, FL. • +Orzell, S. 1997. Natural areas inventory of Avon Park Air Force Range in Polk and Highlands counties, Florida. Florida Natural Areas Inventory. Tallahassee, FL.