

## Appleton-Whittell Research Ranch of the National Audubon Society

IBA web pages	<ul style="list-style-type: none"> <li>• <a href="http://aziba.org/?page_id=199">http://aziba.org/?page_id=199</a></li> <li>• <a href="http://researchranch.audubon.org/landing/about-us/appleton-whittell-research-ranch-awrr">http://researchranch.audubon.org/landing/about-us/appleton-whittell-research-ranch-awrr</a></li> </ul>
Priority	State
Qualifying Criteria	<p>State</p> <p>Site Important to Special Status Avian Species (Botteri's sparrow, Cassin's Sparrow, Grasshopper Sparrow, Rufous-winged Sparrow, Chihuahuan (Lilian's Eastern) Meadowlark)</p> <p>Rare, unique, or exceptional representative habitat/ecological community (desert grassland, un-grazed since 1968)</p> <p>Research and Education</p> <p><b>eBird Bar Chart</b> <a href="https://ebird.org/barchart?byr=1900&amp;eyr=2023&amp;bmo=1&amp;emo=12&amp;r=US-AZ_1230">https://ebird.org/barchart?byr=1900&amp;eyr=2023&amp;bmo=1&amp;emo=12&amp;r=US-AZ_1230</a></p>
IBA Polygon Center Point (Latitude, Longitude)	31.60280, -110.52170
Size	7,722 acres
County	Santa Cruz
Local Communities	Elgin, Sonoita, Patagonia
Description	<p>Nestled within the Sky Islands of southeastern Arizona roughly sixty miles south/southeast of Tucson, this IBA is managed through cooperative partnerships between the National Audubon Society, U.S. Forest Service, Bureau of Land Management, The Nature Conservancy, Swift Current Land &amp; Cattle, and The Research Ranch Foundation. The IBAs nearly 8,000 acres are characterized by expansive semi-desert grassland and oak savannah peppered with Madrean oak woodlands and bisected by cottonwood/sycamore-dominated riparian corridors.</p> <p>In 1968, Frank and Ariel Appleton, the last active grazers on what is now the Research Ranch, determined the property could play a larger purpose than as a small cattle ranch. They sold their cattle and converted the ranch into a research facility to serve as a reference area and control site to evaluate large scale land uses, including but not limited to grazing by domestic livestock. The Appletons formed a non-profit organization, The Research Ranch Inc. (later named the Research Ranch Foundation), to administer the facility. The Forest Service and the Arizona State Land Department agreed to suspend grazing on the allotments held by the Appleton's, and in 1982 management responsibilities were transferred to the National Audubon Society. Today, the conservation impacts of these actions are recognized by the Research Ranch's inclusion in the Las Cienegas National Conservation Area and designation as an Area of Critical Environmental Concern by the Bureau of Land Management and as a Research Natural Area by the U.S. Forest Service.</p>



	Today, the Research Ranch continues to further the ideals and goals of the Appleton family and manages the property for the purposes of research, conservation, and education.
Mission/Goals	The mission of The Research Ranch is to formulate, test, and demonstrate methods to restore and safeguard the bioregion, and provide assistance to community members and policymakers in the protection and stewardship of our native ecosystems, natural resources and quality of life.
Current Habitat Conservation, Planning, and Management Activities	Land use is primarily conservation and research, with limited hunting on National Forest Service land. Management guidelines for the various properties that comprise the Appleton-Whittell Research Ranch are outlined in MOUs or MOAs between National Audubon Society and the entity that holds title to the property. The Forest Service portion is designated a Research Natural Area and BLM property is non-recreational, with all roads designated administrative only, and is included as part of the Las Cienegas National Conservation Area as a distinct Area of Critical Environmental Concern
Land Cover Type <sup>1</sup> (%) and Associated Priority <sup>2</sup> Birds	<p>49.20 Semiarid/Sonoran Savannah Grassland (<i>Scaled Quail, Common Nighthawk, Killdeer, Golden Eagle, Northern Harrier, Swainson's Hawk, Ferruginous Hawk, Long-eared Owl, Gila Woodpecker, American Kestrel, Dusky-capped Flycatcher, Loggerhead Shrike, Chihuahuan Raven, Horned Lark, Cactus Wren, Azure Bluebird, American Pipit, Sprague's Pipit, Rufous-winged Sparrow, Botteri's Sparrow, Grasshopper Sparrow, Lark Bunting, Brewer's Sparrow, Vesper Sparrow, Baird's Sparrow, Savannah Sparrow, Canyon Towhee, Chihuahuan Meadowlark, Scott's Oriole, Pyrrhuloxia</i>)</p> <p>37.17 Chihuahuan Desertscrub (<i>Scaled Quail, Common Nighthawk Golden Eagle, Western Screech-Owl, Gila Woodpecker, American Kestrel, Loggerhead Shrike, Chihuahuan Raven, Horned Lark, Cactus Wren, Canyon Towhee</i>)</p> <p>9.63 Mexican Evergreen Woodland (<i>Western Yellow-billed Cuckoo, Common Nighthawk, Broad-billed Hummingbird, Whiskered Screech-Owl, Mountain Pygmy Owl, Arizona Woodpecker, Dusky-capped Flycatcher, Western Wood Pewee, Azure Bluebird</i>)</p> <p>1.23 Wash</p> <p>1.19 Interior Chaparral (<i>Common Nighthawk</i>)</p> <p>1.58 Other (Pinyon Pine-Juniper Woodland, Riparian, Rock, Sonoran Desertscrub: Lower Colorado River) (<i>Western Yellow-billed Cuckoo, Common Nighthawk, Blue-throated Mountain Gem, Broad-billed Hummingbird, Killdeer, Golden Eagle, Western</i></p>

<sup>1</sup>Southwest Regional Gap Analysis modified to align with ABBA/SWAP habitat types

<sup>2</sup>AGFD SGCN and IBA Qualifying Species

	<p><i>Screech-Owl, Mountain Pygmy Owl, Gila Woodpecker, American Kestrel, Dusky-capped Flycatcher, Thick-billed Kingbird, Western Wood-Pewee, Loggerhead Shrike, Chihuahuan Raven, Horned Lark, Cactus Wren, Lincoln’s Sparrow, Canyon Towhee, Hooded Oriole, Bullock’s Oriole)</i></p>
Related Habitat Accounts*	<p>Low Grasslands Madrean Pine-Oak Pinyon Juniper Lowland Riparian Sonoran Desert</p>
Biological Description	<p>The Appleton-Whittell Research Ranch encompasses a mix of habitats including semi-desert uplands, oak savannahs, and oak woodlands cut by small ephemeral creeks and riparian habitat.</p>
Focal Bird Species	<p><b><u>AGFD Species of Greatest Conservation Need</u></b></p> <p>Tier 1: Western Yellow-billed Cuckoo</p> <p>Tier 2: American Pipit, Arizona Woodpecker, Azure Bluebird, Baird’s Sparrow, Botteri’s Sparrow, Broad-billed Hummingbird, Bullock’s Oriole, Canyon Towhee, Chihuahuan Raven, Common Nighthawk, Gila Woodpecker, Golden Eagle, Gould’s Turkey, Grasshopper Sparrow, Hooded Oriole, Lincoln’s Sparrow, Lark Bunting, Long-eared Owl, Northern Harrier, Rufous-winged Sparrow, Scaled Quail, Savannah Sparrow, Scott’s Oriole, Sprague’s Pipit</p> <p><b><u>Federal Threatened or Endangered Species</u></b></p> <p>Western Yellow-billed Cuckoo</p> <p><b><u>USFWS Birds of Conservation Concern</u></b></p> <p>National – Baird’s Sparrow, Brewer’s Sparrow, Loggerhead Shrike, Lucy’s Warbler, Swainson’s Hawk, Western Yellow-billed Cuckoo,</p> <p>USFWS Region – Botteri’s Sparrow, Burrowing Owl, Grasshopper Sparrow, Loggerhead Shrike, Lucy’s Warbler, Western Yellow-billed Cuckoo</p>
NABCI Bird Conservation Region	<p>34: Sierra Madre Occidental</p>
Ownership	<p>National Audubon Society, Swift Current Land and Cattle Co., Coronado National Forest, Bureau of Land Management, The Nature Conservancy</p>
Conservation Land Status**	<p>Area of Critical Environmental Concern (BLM) and Research-Natural Area (USFS)</p>

Human Population Density	Rural
Legislative District(s)	Arizona Congressional District 7 and State Legislative District 19
NRCS Major Land Resource Area	41: Southeastern Arizona Basin and Range
Visitation, main access, and permits needed	This IBA is located south of the town of Elgin. The miles before the ranch are not paved but are in good condition. Visitors are asked to e-mail <a href="mailto:researchranch@audubon.org">researchranch@audubon.org</a> or call 520-455-5522 before scheduling a trip. Visit to learn more: <a href="https://researchranch.audubon.org/about-us/visiting-research-ranch">https://researchranch.audubon.org/about-us/visiting-research-ranch</a>

\*References available written narratives (located on the SJV website) for general habitat types occurring within the IBA.

\*\*Identifies whether the IBA or portions of the IBA have a special land management designation such as: wilderness, primitive area, wildlife area, refuge, park, monument, designated conservation area, conservation easement, or other similar designation

**IBA Activities:**

<b>Issue or Activity</b>	<b>Priority</b>	<b>Description</b>	<b>Actions</b>
Bird Monitoring	H	Grassland Bird Survey	Annual point counts for grassland birds led by Audubon staff
Bird Monitoring	M	Western Yellow-billed Cuckoo Survey	Surveys conducted by staff and volunteers on multiple transects annually
Bird Monitoring	H	Appleton-Whittell Research Ranch CBC	Annual volunteer survey coordinated by Audubon
Research	L	AWRR Visiting Researcher Program	Various long-term conservation, ecology, and wildlife related research projects led by visiting researchers
Research	M	Motus station	Maintenance and monitoring of on-site Motus station
Research	M	Long-term vegetation monitoring	Long-term monitoring of vegetation on the AWRR through Pace-Frequency transects
Research	H	Student Research Fellowship Program	\$3,000 awarded to students annually to support on-site research
Restoration	H	AWRR Invasive Species Treatment Program	Ongoing treatment of Lehmann Lovegrass and other invasive species on Audubon-owned parcels
Infrastructure and safety	H	Fire Wise	Maintaining Fire Wise best practices to protect AWRR infrastructure
Education	M	Potluck Presentation Series	Program inviting conservation professionals and local community

			for monthly event
Education	M	Volunteer Workdays	Periodic events hosting volunteers to assist with infrastructure and habitat projects
Education	M	Conservation Workshops	Space rented to conservation community for workshops, meetings, etc.
Education	L	Field Trips	Field trips for middle school, high school, and college-aged students
T&E Species	H	Safe Harbor Program	Maintenance of multiple sites to protect populations of Desert Pupfish and Chiricahua Leopard Frogs
IBA Signage	M	Small IBA signs	Consider larger interpretive sign
IBA Dedication Event	L	Formal dedication	Date to be determined
Updated	July, 2023		

**Partners:**

<b>Name</b>	<b>Role(s)</b>	<b>Contact Information</b>	<b>Actions</b>
National Audubon Society	Site Manager and Owner	366 Research Ranch Rd, Elgin, AZ 85611 <a href="tel:(520)455-5522">Phone: (520) 455-5522</a>	Manages the land, buildings, and research program.
U.S. Forest Service (Coronado National Forest)	Land Owner	<a href="#">Tucson Office</a>	Land being managed by NAS through a cooperative agreement.
Bureau of Land Management	Land Owner	<a href="#">Tucson Field Office</a>	Land being managed by NAS through a cooperative agreement.
The Nature Conservancy	Landowner	<a href="#">Phoenix Conservation Center</a>	Canelo Hills Preserve – Cienega being managed by NAS – Transfer of land to Audubon in discussion
Swift Current Land & Cattle Co.	Land Owner	N/A	Land being managed by NAS through a contract agreement. Will transfer to BLM upon completion of the Resolution Copper Mine land exchange.
The Research Ranch Foundation	Cooperative Agreement Partner	N/A	Update agreement

**Conservation Targets:**

These are species, communities, or ecological systems that represent and encompass the full array of biodiversity found in this IBA.

<b>Conservation Target</b>	<b>Current Condition</b>
Grassland Birds	Very Good
Madrean Oak Savannah and Woodland Birds	Very Good
Cottonwood Willow Sycamore Birds	Good

**Conservation Challenges:**

Conservation challenges immediately affect what we are trying to conserve. Through a Miradi process, it was found that drought poses the greatest threat to birds within this IBA.

<b>Challenges</b>	<b>Madrean Oak Savannah and Woodland</b>	<b>Grassland Birds</b>	<b>Cottonwood Willow Sycamore Birds</b>	<b>Summary Rating</b>
Nonnative Grasses		Medium		Low
Fire	Medium	Low	Medium	Medium
Drought	High		High	High
Summary Ratings:	Medium	Low	Medium	High

3) Appleton-Whitwell Research Ranch - National Audubon Society				Severity (1-3)	Scope (1-3)	Permanence (2-4)
Threats on National Database						
Industrialization/Urbanization	Subdivision	7		2	2	3
Invasive species	Plants- Lovegrass	8		2	3	3
Drought		7		2	3	2
Fire		7		3	2	2