Appleton-Whittell Research Ranch of the National Audubon Society

| IBA web pages                                  | <ul> <li>http://aziba.org/?page_id=199</li> <li>http://researchranch.audubon.org/landing/about-us/appleton-whittell-research-ranch-awrr</li> <li>NAS Site 1230</li> <li>AzGFD Conservation Opportunity Area</li> </ul>  |
|--|---|
| Priority                                       | State   |
| Qualifying Criteria                            | State  Site Important to Special Status Avian Species (Botteri's sparrow, Cassin's Sparrow, Grasshopper Sparrow, Rufouswinged Sparrow, Chihuahuan (Lilian's) Meadowlark)  Rare, unique, or exceptional representative habitat/ecological community (desert grassland, un-grazed since 1968)   |
|  | Research and Education  |
|  | eBird Bar Chart <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>   |
| IBA Polygon Center Point (Latitude, Longitude) | 31.60280, -110.52170  |
| Size   | 7,722 acres   |
| County   | Santa Cruz  |
| Local Communities                              | Elgin, Sonoita, Patagonia   |
| Description                                    | 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 & 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.  |
|  | 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 Appleton's 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.   |  |  |  |  |
|---|---|--|--|--|--|
|   | 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 the 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 <sup>1</sup> Southwest Regional Gap Analysis modified to align with ABBA/SWAP habitat types <sup>2</sup> AGFD SGCN and IBA Qualifying Species | 49.23 Semiarid/Sonoran Savannah Grassland (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)  |  |  |  |  |
|   | 37.15 Chihuahuan Desertscrub (Scaled Quail, Common Nighthawk Golden Eagle, Western Screech-Owl, Gila Woodpecker, American Kestrel, Loggerhead Shrike, Chihuahuan Raven, Horned Lark, Cactus Wren, Canyon Towhee)  |  |  |  |  |
|   | 9.64 Mexican Evergreen Woodland (Western Yellow-billed Cuckoo,<br>Common Nighthawk, Broad-billed Hummingbird, Whiskered<br>Screech-Owl, Mountain Pygmy Owl, Arizona Woodpecker, Dusky-<br>capped Flycatcher, Western Wood Pewee, Azure Bluebird)  |  |  |  |  |
|   | 1.23 Wash   |  |  |  |  |
|   | 1.19 Interior Chaparral (Common Nighthawk)  |  |  |  |  |
|   | 0.67 Riparian (Western Yellow-billed Cuckoo, Broad-billed Hummingbird, Red-naped Sapsucker, Lincoln's Sparrow, Bullock's Oriole, Hooded Oriole)   |  |  |  |  |

| 0.90 Other (Pinyon Pine-Juniper Woodland, Rock, Sonoran Desertscrub: Lower Colorado River) (Common Nighthawk, Killdeer, Golden Eagle, Western Screech-Owl, Mountain Pygmy Owl, Gila Woodpecker, American Kestrel, Dusky-capped Flycatcher, Loggerhead Shrike, Chihuahuan Raven, Horned Lark, Cactus Wren, Canyon Towhee,)   |  |  |
|---|--|--|
| Low Grasslands Madrean Pine-Oak Pinyon Juniper Lowland Riparian Sonoran Desert  |  |  |
| 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.  |  |  |
| AGFD Species of Greatest Conservation Need (2022)   |  |  |
| Tier I: Western Yellow-billed Cuckoo  |  |  |
| 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, Western Burrowing Owl, Western Screech-Owl |  |  |
| Federal Threatened or Endangered Species  |  |  |
| Western Yellow-billed Cuckoo  |  |  |
| USFWS Birds of Conservation Concern   |  |  |
| National – Baird's Sparrow, Brewer's Sparrow, Loggerhead Shrike,<br>Lucy's Warbler, Swainson's Hawk, Western Yellow-billed Cuckoo,  |  |  |
| USFWS Region – Botteri's Sparrow, Burrowing Owl, Grasshopper Sparrow, Loggerhead Shrike, Lucy's Warbler, Western Yellow-billed Cuckoo   |  |  |
| 34: Sierra Madre Occidental   |  |  |
| National Audubon Society, Swift Current Land and Cattle Co.,<br>Coronado National Forest, Bureau of Land Management, The Nature<br>Conservancy  |  |  |
|   |  |  |

# Important Bird Areas: Mini Conservation Plan Appleton-Whittell Research Ranch

| Conservation Land Status**                  | Area of Critical Environmental Concern (BLM) and Research-Natural Area (USFS)  |
|---|--|
| Human Population Density                    | Rural  |
| Legislative District(s)                     | Arizona Congressional District 7 and State Legislative District 19   |
| NRCS Major Land Resource<br>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 researchranch@audubon.org 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> |

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

### **IBA** Activities:

| Issue or Activity         | Priority | Description                             | Actions   |  |
|---------------------------|----------|---|---|--|
| Bird Monitoring           | Н        | Grassland Bird Survey                   | Annual point counts for grassland birds led by Audubon staff  |  |
| Bird Monitoring           | M        | Western Yellow-billed Cuckoo<br>Survey  | Surveys conducted by staff and volunteers on multiple transects annually                                    |  |
| Bird Monitoring           | Н        | 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 onsite Motus station  |  |
| Research                  | М        | Long-term vegetation monitoring         | Long-term monitoring of vegetation on the AWRR through Pace-Frequency transects                             |  |
| Research                  | Н        | Student Research Fellowship<br>Program  | \$3,000 awarded to students annually to support on-site research  |  |
| Restoration               | Н        | AWRR Invasive Species Treatment Program | Ongoing treatment of Lehmann<br>Lovegrass and other invasive<br>species on Audubon-owned parcels            |  |
| Infrastructure and safety | Н        | Fire Wise                               | Maintaining Fire Wise best practices to protect AWRR  |  |

<sup>\*\*</sup>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

|                |          |                             | infrastructure                      |
|----------------|----------|-----------------------------|-------------------------------------|
| Education      | М        | 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    | Н        | Safe Harbor Program         | Maintenance of multiple sites to    |
|                |          |                             | protect populations of Desert       |
|                |          |                             | Pupfish and Chiricahua Leopard      |
|                |          |                             | Frogs                               |
| IBA Signage    | М        | Small IBA signs             | Consider larger interpretive sign   |
| IBA Dedication | L        | Formal dedication           | Date to be determined               |
| Event          |          |                             |                                     |
| Updated        | July, 20 | )23                         |                                     |

## Partners:

| Name   | Role(s)                   | Contact Information   | Actions   |
|--|---------------------------|---|---|
| National<br>Audubon<br>Society                             | Site Manager and<br>Owner | 366 Research Ranch Rd, Elgin, AZ<br>8561 I<br>Phone: (520) 455-5522 | Manages the land, buildings, and research program.  |
| U.S. Forest<br>Service<br>(Coronado<br>National<br>Forest) | Land Owner                | Tucson Office   | Land being managed by NAS through a cooperative agreement.  |
| Bureau of Land<br>Management                               | Land Owner                | Tucson Field Office   | Land being managed by NAS through a cooperative agreement.  |
| The Nature<br>Conservancy                                  | Landowner                 | Phoenix Conservation Center   | Canelo Hills Preserve – Cienega<br>being managed by NAS – Transfer of<br>land to Audubon in discussion                                    |
| Swift Current<br>Land & Cattle<br>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   | Cooperative               | N/A   | Update agreement  |

| Name                | Role(s)              | Contact Information | Actions |
|---------------------|----------------------|---------------------|---------|
| Ranch<br>Foundation | Agreement<br>Partner |                     |         |

## **Conservation Targets:**

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

| Conservation Target                        | Current Condition |
|--|-------------------|
| Grassland Birds                            | Very Good         |
| Madrean Oak Savannah and<br>Woodland Birds | Very Good         |
| Cottonwood Willow Sycamore<br>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.

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

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

