<table>
<thead>
<tr>
<th>Boyce Thompson Arboretum and Arnett-Queen Creeks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IBA web pages</strong></td>
</tr>
<tr>
<td>• <a href="http://aziaba.org/?page_id=300">http://aziaba.org/?page_id=300</a></td>
</tr>
<tr>
<td><strong>Priority State</strong></td>
</tr>
<tr>
<td><strong>Qualifying Criteria</strong></td>
</tr>
<tr>
<td>D4vii: Important migratory stop-over/seasonal concentration for migratory land birds (Common-Black Hawk, Peregrine Falcon, Golden Eagle, Zone-tailed Hawk, Purple Martin, Elf Owl, Yellow-billed Cuckoo, Gilded Flicker, Costa’s Hummingbird, Broad-billed Hummingbird, Crissal Thrasher, Bell’s Vireo, Lucy’s Warbler, Yellow Warbler, Abert’s Towhee, Summer Tanager, Western Wood-Pewee, Vermilion Flycatcher, Yellow-breasted Chat, Blue Grosbeak, Hooded Oriole, Gray Flycatcher, Olive-sided Flycatcher, Lincoln’s Sparrow, Grasshopper Sparrow, Savannah Sparrow, Brewer’s Sparrow, MacGillivray’s Warbler, Black-throated Gray Warbler, Wilson’s Warbler, Tree Swallow, Swainson’s Thrush, Western Tanager, Lazuli Bunting, Varied Bunting, Lawrence’s Goldfinch)</td>
</tr>
<tr>
<td>D3 Rare, Unique, or Exceptional Representative Habitat/Ecological Community (Low-elevation riparian)</td>
</tr>
<tr>
<td><strong>IBA Polygon Center Point</strong></td>
</tr>
<tr>
<td>(Latitude, Longitude)</td>
</tr>
<tr>
<td>33.2797 N: 111.1559 W</td>
</tr>
<tr>
<td><strong>Size</strong></td>
</tr>
<tr>
<td>3,071 acres</td>
</tr>
<tr>
<td><strong>County</strong></td>
</tr>
<tr>
<td>Pinal</td>
</tr>
<tr>
<td><strong>Local Communities</strong></td>
</tr>
<tr>
<td>Superior</td>
</tr>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>The Boyce Thompson Arboretum and Arnett-Queen Creeks IBA is located three miles west of Superior. It includes the north slope of Picketpost Mountain, foothill canyons and ridges, and two intermittent creeks. Boyce Thompson Arboretum is the steward for this IBA.</td>
</tr>
<tr>
<td>Boyce Thompson’s 100-acre tract of botanical gardens is open to the public and is used for education, research, land conservation, and low-impact recreation such as photography and wildlife watching. Marsh-fringed Ayer Lake and intermittently flowing Queen and Arnett Creeks provide traces of wetland and riparian habitat while the rugged Magma Ridge and the slopes above the creeks provide stark contrast to the lush vegetation within the park.</td>
</tr>
<tr>
<td><strong>Mission/Goals</strong></td>
</tr>
<tr>
<td>To conserve and protect an exceptional example of low-elevation riparian habitat and the populations of breeding, wintering, and migratory birds that depend on it.</td>
</tr>
<tr>
<td><strong>Current Habitat Conservation</strong></td>
</tr>
<tr>
<td>Protective management facilitated by Boyce Thompson Arboretum</td>
</tr>
</tbody>
</table>
### Planning, and Management Activities

Staff and volunteers helps to maintain the habitat quality of this IBA. In addition, the US Forest Service has designated the segment of Arnett Creek within this IBA as a native fish management area.

### Land Cover Type\(^1\) (%) and Associated Priority\(^2\) Birds

<table>
<thead>
<tr>
<th>Land Cover Type</th>
<th>Associated Priority Birds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonoran Desertscrub: uplands</td>
<td>Peregrine Falcon, Golden Eagle, Common Nighthawk, Gilded Flicker, Costa’s Hummingbird, Gila Woodpecker, Abert’s Towhee, Brewer’s Sparrow,</td>
</tr>
<tr>
<td>Riparian</td>
<td>Common-Black Hawk, Peregrine Falcon, Zone-tailed Hawk, Purple Martin, Elf Owl, Yellow-billed Cuckoo, Gilded Flicker, Costa’s Hummingbird, Broad-billed Hummingbird, Gila Woodpecker, Crissal Thrasher, Bell’s Vireo, Lucy’s Warbler, Yellow Warbler, Abert’s Towhee, Summer Tanager, Western Wood-Pewee, Vermilion Flycatcher, Yellow-breasted Chat, Blue Grosbeak, Hooded Oriole, Gray Flycatcher, Olive-sided Flycatcher, Lincoln’s Sparrow, MacGillivray’s Warbler, Black-throated Gray Warbler, Wilson’s Warbler, Tree Swallow, Swainson’s Thrush, Western Tanager, Lazuli Bunting, Varied Bunting, Lawrence’s Goldfinch</td>
</tr>
<tr>
<td>Mohave Desertscrub</td>
<td>Peregrine Falcon, Golden Eagle, Common Nighthawk, Brewer’s Sparrow</td>
</tr>
<tr>
<td>Pinyon Pine-Juniper Woodland</td>
<td>Common Nighthawk, Gray Flycatcher, Black-throated Gray Warbler</td>
</tr>
<tr>
<td>Interior Chaparral</td>
<td>Peregrine Falcon, Golden Eagle, Common Nighthawk, Gray Flycatcher</td>
</tr>
<tr>
<td>(Semiarid/Sonoran Savannah Grassland, Sonoran/Mohave Desertscrub, Sonoran Desertscrub: Lower Colorado River)</td>
<td>Peregrine Falcon, Golden Eagle, Common Nighthawk, Grasshopper sparrow, Savannah Sparrow, Brewer’s Sparrow</td>
</tr>
</tbody>
</table>

### Related Habitat Accounts\(^*\)

<table>
<thead>
<tr>
<th>Related Habitat Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonoran Desert</td>
</tr>
<tr>
<td>Lowland Riparian</td>
</tr>
<tr>
<td>Pinyon Juniper</td>
</tr>
</tbody>
</table>

### Biological Description

The Boyce Thompson Arboretum and Arnett-Queen Creeks IBA provides lush low-elevation riparian habitat and over 100-acres of botanical gardens. These resources serve as an oasis in the starkly-contrasting upland Sonoran Desert in which the park and creeks are situated.

Probably at least partly due to the oasis-like nature of the area, at least 78 accidental species (5 or fewer records) and 48 casual species (more than 5, but not occurring annually) have been recorded since 1976. Many of these birds were spring and/or fall transients, but some were noted during summer and others during winter. The site’s attractiveness to vagrants and uncommon visitors is likely to continue, as exemplified by the presence of an Olive Warbler.
(previously undocumented here) during the inaugural Superior Christmas Bird Count held on January 4, 2004. In addition, populations of some transient species periodically reach relatively high numbers, particularly on "fall-out" days. On occasion, dozens of some species and scores of others have been noted during spring and fall migration periods.

<table>
<thead>
<tr>
<th>Focal Bird Species</th>
<th><strong>IBA Qualifying Species</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State: Common-Black Hawk, Peregrine Falcon, Golden Eagle, Zone-tailed Hawk, Purple Martin, Elf Owl, Yellow-billed Cuckoo, Gilded Flicker, Costa’s Hummingbird, Broad-billed Hummingbird, Crissal Thrasher, Bell’s Vireo, Lucy’s Warbler, Yellow Warbler, Abert’s Towhee, Summer Tanager, Western Wood-Pewee, Vermilion Flycatcher, Yellow-breasted Chat, Blue Grosbeak, Hooded Oriole, Gray Flycatcher, Olive-sided Flycatcher, Lincoln’s Sparrow, Grasshopper Sparrow, Savannah Sparrow, Brewer’s Sparrow, MacGillivray’s Warbler, Black-throated Gray Warbler, Wilson’s Warbler, Tree Swallow, Swainson’s Thrush, Western Tanager, Lazuli Bunting, Varied Bunting, Lawrence’s Goldfinch</td>
</tr>
</tbody>
</table>

**AGFD Species of Greatest Conservation Need**

Tier A: Western Yellow-billed Cuckoo, Peregrine Falcon

Tier B: Western Grasshopper Sparrow, Golden Eagle, Common Nighthawk, Gilded Flicker, Broad-billed Hummingbird, Yellow Warbler, Lincoln’s Sparrow, Gila Woodpecker, Savannah Sparrow, Abert’s Towhee, Bell’s Vireo

**Federal Threatened or Endangered Species**

Western Yellow-billed Cuckoo

**USFWS Birds of Conservation Concern**

National – Peregrine Falcon, Western Yellow-billed Cuckoo, Elf Owl, Costa’s Hummingbird, Olive-sided Flycatcher, Bell’s Vireo, Lucy’s Warbler, Brewer’s Sparrow, Lawrence’s Goldfinch

USFWS Region – Common-Black Hawk, Golden Eagle, Peregrine Falcon, Western Yellow-billed Cuckoo, Elf Owl, Costa’s Hummingbird, Gilded Flicker, Bell’s Vireo, Lucy’s Warbler, Yellow Warbler, Grasshopper Sparrow

| NABCI Bird Conservation Region | 33: Sonoran and Mojave Deserts |
Ownership | Boyce Thompson Arboretum and U.S Forest Service, Tonto NF
---|---
Conservation Land Status** | Private and National Forest
Human Population Density | Rural
Legislative District(s) | Arizona Congressional District 4 and State Legislative District 8
NRCS Major Land Resource Area | 50: Mogollon Transition
Visitation, main access, and permits needed | From Phoenix (about 1 hour): Take Highway 60 east toward Superior until you reach milepost #223.
From Tucson (about 2 hours): Take Oracle Road north and turn left at highway 79. Continue through and past Florence to highway 60. Then, turn right and continue 12 miles east.
For more information, visit [https://arboretum.ag.arizona.edu/](https://arboretum.ag.arizona.edu/).

**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:

<table>
<thead>
<tr>
<th>Issue or Activity</th>
<th>Priority</th>
<th>Description</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBC</td>
<td>H</td>
<td>Annual community science event (all bird count held in the winter)</td>
<td>Included in the Superior Christmas Bird Count Circle</td>
</tr>
<tr>
<td>Global Big Day Migration Count</td>
<td>H</td>
<td>Annual community-science event (all-bird count held in the spring)</td>
<td>Included in the Pinal County count</td>
</tr>
<tr>
<td>AZ IBA Surveys</td>
<td>M</td>
<td>Annual breeding bird surveys</td>
<td>TAS lead- Encourage eBird entries</td>
</tr>
<tr>
<td>IBA Signage</td>
<td>L</td>
<td>Install signs identifying the site as an IBA</td>
<td>Replace signs as needed</td>
</tr>
<tr>
<td>IBA Dedication</td>
<td>NA</td>
<td>Dedication Event 2008</td>
<td>Completed</td>
</tr>
</tbody>
</table>

Updated April 2020

Partners:

<table>
<thead>
<tr>
<th>Name</th>
<th>Role(s)</th>
<th>Contact Information</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boyce Thompson Arboretum</td>
<td>Land Manager</td>
<td><a href="https://www.btarboretum.org/">https://www.btarboretum.org/</a> (520) 689-2723</td>
<td>Events, Field Trips</td>
</tr>
</tbody>
</table>
**Important Bird Areas: Mini Conservation Plan**

**Updated April 2021**

<table>
<thead>
<tr>
<th>Name</th>
<th>Role(s)</th>
<th>Contact Information</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wild Arizona</td>
<td>Conservation steward</td>
<td><a href="https://www.wildarizona.org/contact/">https://www.wildarizona.org/contact/</a></td>
<td><a href="https://www.wildarizona.org/contact/">Arnett Creek Restoration</a></td>
</tr>
</tbody>
</table>

**Conservation Targets:**

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

<table>
<thead>
<tr>
<th>Conservation Target</th>
<th>Current Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Fish</td>
<td>Fair</td>
</tr>
<tr>
<td>Desert Birds</td>
<td>Good</td>
</tr>
<tr>
<td>Riparian Birds</td>
<td>Good</td>
</tr>
</tbody>
</table>

**Conservation Challenges:**

Conservation challenges are primarily human activities that immediately affect what we are trying to conserve. Through a Miradi process, it was found that water quantity and quality pose the greatest threats to birds within this IBA.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Desert Birds</th>
<th>Riparian Birds</th>
<th>Native Fish</th>
<th>Summary Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altered Water Regime (Drought)</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Grazing</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Wild Fire</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Mining</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
</tbody>
</table>

**Summary Ratings:**

- Medium
- Medium
- High
- Medium

**Boyce Thompson Arboretum and Arnett-Queen Creeks**

<table>
<thead>
<tr>
<th>Threats on National Database</th>
<th>Severity (1-3)</th>
<th>Scope (1-3)</th>
<th>Permanence (2-4)</th>
<th>Immediacy (Optional 1-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraction Industry</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Forest Grazing</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Natural events Fire, Drought</td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

[Bottom of the page]

5