## **Tucson Sky Islands**

IBA web pages	http://aziba.org/?page_id=2374					
	<ul> <li>https://www.audubon.org/important-bird-areas/tucson-sky-island</li> <li>AzGFD Conservation Opportunity Area</li> </ul>					
_	AzGFD Conservation Opportunity Area  Global					
Priority	Global					
Qualifying Criteria	Global: Species of Conservation Concern (Mexican Spotted Owl)					
	State: Species in rare/unique habitat (Madrean Occidental Sky Island and Sonoran Desert Uplands)					
IBA Polygon Center Point (Latitude, Longitude)	32.365° N, 110.657° W					
Size	327,040 acres					
County	Pima					
Local Communities	Tucson					
Description	This IBA consists of the Santa Catalina Mountains, Saguaro National Park (Rincon Mountain District), and Catalina State Park. It supports a rich assortment of habitat types due to the range of elevation found within its boundaries: Sonoran Desertscrub, grasslands, riparian corridors, tinajas, and both mixed-conifer and Madrean pine-oak woodlands.					
	Virtually all the land within this IBA is open to the public and there are some popular recreation areas favored by birders including Catalina Highway, Happy Valley, and Saguaro National Park. There are also areas in the Rincon and Santa Catalina Mountains that, while difficult to access because of road scarcity, are also open to the public.					
	This area is used for many purposes. For example, the National Forest Service portion of the IBA is used for recreation and logging and the small portion of BLM land supports some grazing, Because of the areas proximity to Tucson, Arizona's second largest city, however, the main use is recreation.					
	The main threats to this area are fire, recreation, invasive species, and urban impacts. Fuel buildup is a concern in this portion of the Coronado National Forest and in 2003 the Aspen Fire burned 84,750 acres of forest in the Santa Catalina Mountains. Recreation and road disturbance also have a notable impact on this habitat. The biggest threat to the saguaro uplands habitat of the IBA is urban encroachment and development. With this influx of people has come another threat to the saguaro – exotic plants. Exotic plants almost					









	always out-compete native plants for the limited resources of water and nutrients. Exotic plants – particularly buffelgrass, fountain grass, and red brome – have also led to an increase in wildfires in the desert, which harm or kill native vegetation, including the saguaro. <a href="https://www.nps.gov/sagu/learn/nature/buffelgrass.htm">https://www.nps.gov/sagu/learn/nature/buffelgrass.htm</a>				
Mission/Goals	To conserve and protect a unique example of a Madrean Occidental Sky Island ecosystem, Sonoran Desert Uplands, and the populations of special status avian species that depend on them.				
Current Habitat Conservation, Planning, and Management Activities	The public lands and parks within this IBA are managed for multiple uses and to mitigate the main impacts to the area which include fire, recreation, invasive species and urban encroachment.				
Land Cover Type <sup>1</sup> (%) and Associated Priority <sup>2</sup> Birds  'Southwest Regional Gap Analysis modified to align with ABBA/SWAP	25.31 Mexican Evergreen Woodland (Western Yellow-billed Cuckoo, Mexican Spotted Owl, Magnificent Hummingbird, Gould's Turkey, Whiskered Screech Owl, Western Screech-Owl, Arizona Woodpecker, Western Wood-Pewee)				
habitat types <sup>2</sup> AGFD SGCN and IBA Qualifying Species	14.85 Semiarid/Sonoran Savannah Grassland (Peregrine Falcon, Golden Eagle, Peregrine Falcon, Prairie Falcon, Gould's Turkey, Gila Woodpecker, Rufous-winged Sparrow, Vesper Sparrow, Scott's Oriole, Pyrrhuloxia)				
	14.21 Chihuahuan Desertscrub (Peregrine Falcon, Prairie Falcon, Golden Eagle, Verdin, Cactus Wren, Pyrrhuloxia, Canyon Towhee)				
	11.29 Pinyon Pine-Juniper Woodland (Golden Eagle, Peregrine Falcon, Gould's Turkey, Woodhouse's Scrub Jay, Western Screech-Owl, Western Wood-Pewee, Scott's Oriole, Canyon Towhee)				
	11.20 Madrean Pine-Oak Woodland (Band-tailed Pigeon, Mexican Spotted Owl, Flammulated Owl, Whiskered Screech Owl, Northern Pygmy-Owl, Northern Goshawk, Blue-throated Hummingbird, Buff-breasted Flycatcher, Western Wood-Pewee, Gould's Turkey, Mountain Chickadee, Hermit Thrush, Grace's Warbler)				
	7.80 Sonoran Desertscrub: Uplands (Golden Eagle, Peregrine Falcon, American Kestrel, Harris's Hawk, Western Screech-Owl, Gila Woodpecker, Verdin, Cactus Wren, Desert Purple Martin, Pyrrhuloxia, Canyon Towhee)				
	6.39 Rock (Golden Eagle, Peregrine Falcon, Prairie Falcon)				
	4.35 Interior Chaparral (Golden Eagle, Peregrine Falcon, Woodhouse's Scrub-Jay, Black-chinned Sparrow)				
	1.56 Riparian (Western Yellow-billed Cuckoo, Mexican Spotted Owl, Northern Goshawk, Broad-billed Hummingbird, Yellow Warbler,				

	Northern Buff-breasted Flycatcher, Western Wood-Pewee, Broadbilled Hummingbird, Magnificent Hummingbird, Blue-throated Hummingbird, Costa's Hummingbird, Gould's Turkey, Whiskered Screech Owl, Western Screech-Owl, Flammulated Owl, Gila Woodpecker, Abert's Towhee, Arizona Woodpecker, Desert Purple Martin, Bell's Vireo, Bullock's Oriole, Hooded Oriole), Common Black Hawk  3.04 Other (Wash, Mesquite, Aspen Forest, Mohave Desertscrub, Sonoran/Mohave Desertscrub, Urban/Residential)
Related Habitat Accounts*	Sonoran Desert Madrean Pine-Oak Conifer Forest Pine Pinyon Juniper Low Grasslands Lowland Riparian
Biological Description	This IBA supports a rich assortment of habitat types due to the range of elevation found within its boundaries: Sonoran Desertscrub, grasslands, riparian corridors, tinajas, and both mixed-conifer and Madrean pine-oak woodlands. These habitats are described in more detail below.  Sonoran Desertscrub and Grasslands:  Wildlife in the lower elevations (below 5,000') is comprised of species typical of the Arizona Upland subdivision of the Sonoran Desert. Resident fauna includes such well-known and conspicuous species such as mule deer, coyote, javelina, diamondback rattlesnake, Gila monster, Greater Roadrunner, Gambel's Quail, and many other bird, mammal, and reptile species. In addition to these more common species, the habitat also supports rarer and more reclusive animals such as mountain lion, badger, and Golden Eagle. Birds that typify this habitat include Costa's Hummingbird, Gilded Flicker and Elf Owl.  This area has a poorly defined desert grassland biome around 5,000' that varies in size and integrity depending on aspect and fire history. Wildlife found in these areas include both Sonoran Desertscrub and woodland species as well as a few grassland specialists including the western harvest mouse, ornate box turtle, Scaled Quail, and Savannah, Vesper, and Lark Sparrows. IBA Species here are Scaled Quail, Rufous-winged Sparrow and Brewer's Sparrow (winter).  Riparian Areas/Corridors and Tinajas  Riparian areas (denser, more structured vegetation associated with surface water and mesic conditions) provide water, food and shelter crucial to sustaining wildlife populations well beyond obligate riparian

species. Animals that rely on these areas, particularly at the lower elevations, include aquatic vertebrates, amphibians, and many nesting bird species. During the summer months, these areas are a vital resource to the majority of the areas birds and other wildlife. In addition, these areas provide habitat "corridors" that facilitate movements of large terrestrial vertebrates (e.g., black bear, mountain lion, and deer) between mountain ranges.

Mixed-conifer and Madrean Pine-oak Woodlands

The Santa Catalina and Rincon Mountains support a variety of forest types including pine-oak, pine, and mixed conifer and provide habitat for a suite of wildlife species that otherwise seem incongruous to the region. Examples include black bear, white-tailed deer, coatimundi, Arizona gray squirrel, cliff chipmunk, Madrean alligator lizard, greater short-horned lizard, Arizona black rattlesnake, and a host of bird species including Elegant Trogon, Olive Warbler, Red-faced Warbler, Grace's Warbler, Mexican Spotted Owl, Whiskered Screech Owl, Elf Owl, Northern Goshawk, Yellow-eyed Junco, Wild Turkey, and Buffbreasted Flycatcher.

The unique avian community supported by mixed-conifer forest and Madrean pine-oak woodlands are vulnerable to disturbance because the area encompassed by montane forests represents only a small fraction of the total landmass of the region. Moreover, the highest densities of breeding birds in these mountains are often concentrated in a relatively small number of drainages. Due to the limited and disjointed nature of these habitats in the region, they are of special management concern.

#### **Focal Bird Species**

# Bold Type are Road to Recovery species

### **AGFD Species of Greatest Conservation Need**

<u>Tier I:</u> **Western Yellow-billed Cuckoo**, Peregrine Falcon, **Mexican Spotted Owl** 

<u>Tier 2:</u> Abert's Towhee, American Kestrel, Arizona Woodpecker, Band-tailed Pigeon, Black-throated Sparrow, **Black-chinned Sparrow,** Broad-billed Hummingbird, Bullock's Oriole, Cactus Wren, Common Black Hawk, Blue-throated Mountain Gem, Costa's Hummingbird, Desert Purple Martin, Elegant Trogon, Flammulated Owl, Gila Woodpecker, Golden Eagle, **Grace's Warbler,** Harris's Hawk, Hermit Thrush, Hooded Oriole, Mountain Chickadee, Northern Buff-breasted Flycatcher, Northern Goshawk, Northern Pygmy-Owl, **Olive-sided Flycatcher**, Prairie Falcon, Pyrrhuloxia, Rivoli's Hummingbird, Red-faced Warbler, Rufous-winged Sparrow, Scott's Oriole, Verdin, Vesper Sparrow, Western Screech-Owl, Whiskered Screech Owl, Woodhouse's Scrub-Jay

#### Federal Threatened or Endangered Species

	Western Yellow-billed Cuckoo, Mexican Spotted Owl  USFWS Birds of Conservation Concern  National – Peregrine Falcon, Western Yellow-billed Cuckoo, Flammulated Owl, Elf Owl, Mexican Spotted Owl, Costa's Hummingbird, Olive-sided Flycatcher, Bell's Vireo, Virginia's Warbler, Grace's Warbler, Lucy's Warbler, Red-faced Warbler, Brewer's Sparrow, Black-chinned Sparrow, Varied Bunting  USFWS Region – Golden Eagle, Peregrine Falcon, Western Yellow- billed Cuckoo, Flammulated Owl, Elf Owl, Costa's Hummingbird, Gilded Flicker, Northern Beardless-tyrannulet, Buff-breasted Flycatcher, Bell's Vireo, Olive Warbler, Lucy's Warbler, Yellow			
NABCI Bird Conservation	Warbler, Grace's Warbler, Red-faced Warbler, Rufous-winged Sparrow, Black-chinned Sparrow, Varied Bunting,  33: Sonoran and Mojave Deserts			
Region	34: Sierra Madre Occidental			
Ownership	National Park Service, Arizona State Parks, Pima County Parks, and limited private ownership			
Conservation Land Status**	National Park, State Park, and County Park			
Human Population Density	Semi-urban Semi-urban			
Legislative District(s)	Arizona Congressional District 6 and State Legislative Districts 7, 17 & 19			
NRCS Major Land Resource Area	40: Sonoran Basin and Range 41: Southeastern Arizona Basin and Range			
Visitation, main access, and permits needed	<ul> <li>From Tucson, there are several good access points for the public, including:         <ul> <li>Catalina Highway which travels up Mount Lemmon and provides access the higher elevations of the Santa Catalina Mountains</li> <li>Cactus Forest Loop Road which provides excellent access to Saguaro National Park</li> <li>Happy Valley Road, which gives access into Paige Creek and other areas of great sycamore and oak riparian habitat in Happy Valley.</li> </ul> </li> </ul>			

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

<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

#### **IBA** Activities:

Issue or Activity	Priority	Description	Actions	
Bird Monitoring	H	Tucson Valley and Santa Catalina	Annual winter bird count	
		Mountains Christmas Bird Counts		
Bird Monitoring	I	breeding bird surveys as part of NPS	Annual with IBA volunteers	
		BioBlitz and species-specific surveys		
		for Gila Woodpecker and Elf Owl		
Bird Monitoring	М	eBird records	Encourage eBird entries	
IBA Signage	М	Install signs identifying the site as an	an Partial-TAS lead	
		IBA		
IBA Dedication	DONE	A formal recognition event	Event at Saguaro National Park	
			East summer 2019	

#### Partners:

Name	Role(s)	Contact Information	Actions	
Coronado National Forest	Land Manager	Santa Catalina Ranger District Sabino Canyon 5700 N. Sabino Canyon Rd. Tucson, AZ 85750 520-749-8700	Implement Coronado National Forest Plan	
Saguaro National Park East	Land Manager	Rincon Mountain District and Headquarters 3693 South Old Spanish Trail Tucson, AZ 85730-5601 520-733-5153	Maintain trails and public access to the park. Conserve and protect biodiversity values.	
Catalina State Park	Land Manager	11570 N. Oracle Road Tucson, AZ 85737 520-628-5798	Maintain trails and public access to the park and west side of Catalina Mountains	
Pima County Natural Resources, Parks and Recreation	Land Manager	3500 W. River Road Tucson, AZ 85741 520-724-5000	Implement the Pima County Sonoran Desert Conservation Plan	
Tucson Audubon Society	IBA Steward	300 E University Blvd # 120, Tucson, AZ 85705 (520) 629-0510 tucsonaudubon.org/	Volunteers coordination IBA and Tucson Bird Count efforts. BioBlitz at SNP East	

## **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
Upland Sonoran Desert and Desert Grassland Birds	Good
Madrean Oak Woodland and Sycamore/Oak Birds	Very Good
Mixed Conifer, Pine, and Pine/Oak Birds	Fair

## **Conservation Challenges:**

Conservation challenges are primarily human activities that immediately affect what we are trying to conserve. Through a Miradi process, altered fire regime and invasive plants pose the greatest threats to birds within this IBA.

Challenges	Mixed Conifer, Pine, and Pine/Oak Birds	Madrean Oak Woodland and Sycamore/Oak Birds Desert Grassland Birds		Summary Rating
Forest Grazing	Low	Low	Low	Low
Altered Fire Regime	Very High	Very High	High	High
Recreation/Tourism	Low	Medium	Low	Medium
Nonnative Grasses	Low	Low	High	Medium
Summary Ratings:	Medium	High	Medium	High

Tucson Sky Islands			Severity (1-3)	Scope (1-3)	Permanence (2-4)	Immediacy (Optional 1-2)
Threats on National Datab Forest Grazing Natural events Recreation/tourism	Altered Fire Regime	3 9 4	1 3 1	1 3 1	1 3 2	
Invasive Non-native species	Buffelgrass	7	2	2	3	

