**U.S. Fish & Wildlife Service** 

# Sonny Bono Salton Sea National Wildlife Refuge

Wildlife List



# The Sonny Bono Salton Sea National Wildlife Refuge holds the distinction of having the most diverse array of bird species found on any $-national\ wildlife$ refuge in the west. Common egrets in the bulrush. D.B. Marshall/USFWS

#### Introduction

Established as a national refuge in 1930 by a Presidential Proclamation, the Sonny Bono Salton Sea National Wildlife Refuge is a haven for a diverse range of wildlife. Most of the refuge's 37,600 acres are now inundated due to flooding by the Salton Sea. Less than two thousand acres of agricultural fields and freshwater marsh remain manageable.

Located 228 feet below sea level, the Salton Sea is one of the lowest places in the United States. The sea was created in 1905, when a diversion structure on the Colorado River failed, and the river flowed into the Salton Sink for 16 months. Today, the waters of the Salton Sea are slowly receding.



An egret chick and egg in their nest

#### **Enjoying the Refuge's Wildlife**

The study of wild animals in their natural habitat has become an increasingly popular pastime for many people. Viewing of wildlife can be greatly enhanced by a pair of binoculars or a spotting scope. This equipment allows the wildlife to be viewed at a distance, thus minimizing disturbance. Also, a good wildlife/birding guide is helpful in locating and identifying the various species.



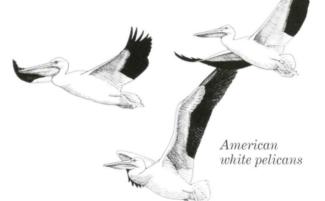
#### **Enjoying the Refuge's Birdlife**



Numbers and species of birds you will see here varies according to season. Heavy migrations of waterfowl, marsh and shorebirds occur during spring and fall. Throughout the mild winter and spring a wide variety of songbirds and birds of prey are present. They are attracted to the freshwater marshes and riparian habitat along the New and Alamo Rivers. The greatest number of species is present from October to May.

When looking at a bird, pay close attention to characteristics such as color, size, shape, wing, and head markings. Always observe first and then refer to your identification book because the bird may move out of sight quickly. This is especially true of perching birds.

The following list of birds contains 424 species that have been recorded at Sonny Bono Salton Sea National Wildlife Refuge (NWR). The common name and taxonomic order used in this list follows that appearing in the 6th edition of the American Ornithologists' Union Check List of North American Birds, published in 1998, and subsequent revisions through 2008.



#### **Sonny Bono Salton Sea NWR List Key**

Wildlife species in this brochure have been grouped into five categories: birds, mammals, reptiles, amphibians, and fish.

#### Seasons

- Sp Spring, April through May
- S Summer, June through August
- F Fall, September through October
- W Winter, November through March

Spring—Some species migrate much earlier than others, appearing in the Salton Sea area during March, but are none the less considered spring migrants rather than winter visitors. Their status at this time of the year is indicated under Spring rather than Winter.

Summer—Status indicated under this heading indicates the relative abundance of summering birds. Observers must remember late spring migrants can be found into early June, and that early fall migrants can occur as early as late June, but these are not summering birds. Their status as migrants is indicated under Spring and Fall rather than Summer.

Fall—Since some species, particularly shorebirds, migrate quite early in the fall, their status as fall migrants in July and August is indicated under Fall rather than Summer.

Winter—As indicated above, some early spring migrants may be present during March or earlier, as with swallows. Likewise, some late fall migrants linger in November. However, these occurrences are omitted from the winter column so as to clearly indicate the status of each species as a winter visitor.

#### Season Abundance Codes

- a abundant, found in large numbers.
- c common to abundant, easily found in suitable habitat.
- u uncommon to fairly common, found when looked for in suitable habitat, but can be missed.
- r rare to very uncommon, more often missed than seen, even when looked for in suitable habitat.
- o occasional, normally less than five individuals per season during any given year, but to be looked for.
- 1-9 number of records is less than ten records for the entire area, and not to be expected.

#### **Habitat Codes**

- o open water—restricted to the open water of the Salton Sea.
- b beach and mudflat—the shore line of the Salton Sea and other areas of shallow water and mud, including flooded fields.
- m marshes—cattail marshes and marshy areas along rivers and canals, and shallow lakes.
- f farmland—agricultural land found extensively throughout the Imperial Valley south of the Salton Sea; includes both planted and unplanted fields.
- s shrubland—mesquite thickets and other brushy areas. Some shrubland contains scattered trees.
- r riparian vegetation—areas of salt cedar and willows along waterways, and at some points along the shore of the Salton Sea.
- a aerial—strong flying species most often seen in the air.

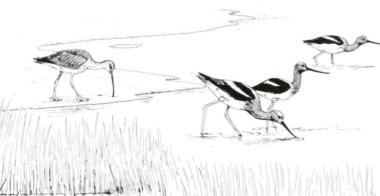
#### Habitat Codes continued

 h - houses and towns—immediate vicinity of ranch houses and the residential areas of towns and urban spaces. Here large trees and ornamental planting support a variety of landbirds.

#### Codes Listed Under Notes

Listed in the notes (N) column is information over and above the relative abundance shown for each season and it clarifies the status of some species in the area.

- b species regularly breeds in the area.
- b+- species has bred in the area, and may continue to breed sporadically in the area, but is not expected to become a regularly nesting species.
- species occurs only locally within the area.
- e an erratic species, occurring in numbers some years, but very scarce or even absent in others.
- x species formerly occurred in the area, but is now extirpated, occurring only as an accidental straggler if at all.
- xb an extirpated breeder formerly nesting in the area, but with no recent breeding records.
- p a post-breeding visitor to the area from the south, most numerous in the area between July and September.
- \* Federally Endangered or Threatened Species



#### **Birds of Sonny Bono Salton Sea NWR**

Common Name	Н	Sp	S	F	W	N
Geese, Swans and Ducks						
Black-bellied Whistling Duck	m	0	0	0		
Fulvous Whistling Duck	m	0	0			xb
Greater White-fronted Goose	fm	0	3	u	u	
Taiga/Tundra Bean Goose					1	
Snow Goose	fom	r	0	c	a	
Ross' Goose	fom	r	0	c	a	
Cackling Goose	fom			0	0	
Canada Goose	fom	0	0	u	u	
Brant Goose	om	r	r	0		
Tundra Swan	om	2	1		0	
Wood Duck	m	2	1		0	
Gadwall	om	u	u	u	u	b+
Eurasian Wigeon	om			0	0	
American Wigeon	om	ľ	0	c	c	
American Black Duck					1	
Mallard	fom	u	u	u	u	b+
Blue-winged Teal	om	r	0	u	u	
Cinnamon Teal	fom	c	u	c	u	b
Northern Shoveler	bmo	c	r	a	a	
Northern Pintail	om	r	r	c	c	
Baikal Teal					1	
Green-winged Teal	om	u	0	c	c	
Canvasback	0	0	0	0	u	
Redhead	mo	u	u	u	u	b
Ring-necked Duck	mo	0	0	r	r	
lufted Duck					1	
Greater Scaup	O	0	0		u	
Lesser Scaup	O	0	0	u	c	
Surf Scoter	O	r	0	0	0	
White-winged Scoter	O	0	0		0	
Black Scoter		2	7			
Long-tailed Duck	O	0	2			
Bufflehead	O	0	0		u	b+
Common Goldeneye	O	0	0		u	
Barrow's Goldeneye					7	
Hooded Merganser	mo	1	1		r	
Common Merganser	O	0	7		0	
Red-breasted Merganser	0	r	0	r	0	
Ruddy Duck	om	c	u	c	a	b

Common Name	Н	Sp	S	F	W	N	Common Name	Н	Sp	S	F	W	N
Pheasants		1		- William		1	Bitterns, Herons and Egrets						
Ring-Necked Pheasant	f	u	u	u	u	b	American Bittern	m	r	0	r	r	
							Least Bittern	m	u	u	u	u	b
New World Quail							Great Blue Heron	bm	c	c	c	c	b
Gambel's Quail	S	c	c	c	С	b	Great Egret	bfm	a	a	a	a	b
							Snowy Egret	bm		a	a	a	b
Loons							Little Blue Heron	m	0	0	0	0	b+
Red-throated Loon		4		3	4		Tricolored Heron	m	0	0	0	0	
Pacific Loon	O	0		0	1		Reddish Egret	mb		0	0	0	
Common Loon	0	r		r.	4		Cattle Egret	fm	a	a	a	a	b
							Green Heron	m	u	u	u	u	~
Grebes							Black-crowned Night Heron	m	c	c	c	c	
Least Grebe					1		Yellow-crowned Night Heron	111	C	1	C	C	
Pied-billed Grebe	mo	c	c	c	С	b	Tenow-crowned Tright Heron			1			
Horned Grebe	O	0	5	0	0		Ibis and Spoonbills						
Red-necked Grebe				1			White Ibis			2			
Eared Grebe	mo	c	u	c	c	b+	Glossy Ibis	f		0	0		
Western Grebe	mo		u	u		b	White-faced Ibis	mf	c	c	o a		b
Clark's Grebe	mo	u	u	u	u	b	Roseate Spoonbill	bm				a	
Albatross							Roseate Spoonom	Ш	0	0	0	0	ер
Laysan Albatross		3	1				Stork						
			_				Wood Stork	bm		r	0		p
Petrels and Shearwaters													
Cook's Petrel			3				New World Vultures						
Wedge-tailed Shearwater			1				Turkey Vulture	af	c	u	c	С	
Buller's Shearwater			1										
Sooty Shearwater		1	7				Kites, Eagles and Hawks						
							Osprey	ao	r	r	u	u	
Storm-Petrels							White-tailed Kite	afr	r	r	u	u	b+
Leach's Storm Petrel			1	1			Bald Eagle	am		1	0	0	
Black Storm Petrel				3			Northern Harrier	afm	11	0	c	c	b+
Least Storm Petrel			1	2			Sharp-shinned Hawk	afh			u	u	~ 1
			_	1271			Cooper's Hawk	afh		2	u	u	
Boobies							Harris' Hawk	sf	и	0	0	0	xb
Blue-footed Booby	0			0	3	ер	Red-shouldered Hawk	hrs	0	0			AU
Brown Booby	0			0	1	ep		III'S			0	0	
	1.7			-0.45		1	Broad-winged Hawk	- 6	1	4		2	
Pelicans							Swainson's Hawk	af	r	1	r	0	
American White Pelican	oa	a	u	a	c	xb	Zone-tailed Hawk	af		1	0	0	1
Brown Pelican*	0	u	u	a	c	b+	Red-tailed Hawk	af	u	0	c	С	b+
							Ferruginous Hawk	af			u	u	
Cormorants							Rough-legged Hawk	af			O	0	
Brandt's Cormorant		1					Golden Eagle		2		2	1	
Double-crested Cormorant	0	a	a	a	a	b							
Neotropic Cormorant		3	4	2	1		Caracaras and Falcons						
1							Crested Caracara					2	
Darters							American Kestrel	afh	c	c	c	С	b
Anhinga		1			1		Merlin	afh	r		r	r	
6					_		Peregrine Falcon	abf	u	u	u	u	
Frigatebirds							Prairie Falcon	af			r	r	
Magnificent Frigatebird	a		0	0	1	ер							
0		3			-	-F							

Red-necked/Little Stint	Common Name	Н	Sp	S	F	W	N	Common Name	Н	Sp	S	F	W	N
Clasper Rail*	Rails, Gallinules and Coots		HBE					Red-necked/Little Stint				1		75-
Clasper Rail	Black Rail	m	0	O	0	0	b	Least Sandpiper	bf	c		c	a	
Virginia Rail	Clapper Rail*	m	u	u	u	u	b			4				
Soria		m	u	$\mathbf{r}$	u	u	b		bf	0		r		
Common Moorhen		m	u		c	c				0			1	
Cranes	Common Moorhen	m	u	u	u	u	b						_	
Carnes	American Coot	om	a	c	a	a	b		b			11	11	
Sandhill Crane									D				и	
Plovers								1 1	h				r	
Plovers	Sandhill Crane	$_{ m fm}$			c	c			D				1	
Short-billed Dowitcher									hf				0	
Black-bellied Olowitcher   bir   c   c   c   c   c   c   c   c   c										0				
Pacific Golden-Plover	Black-bellied Plover	bf	c	r	c	c		4						
Sanowy Plover	American Golden Plover	bf	0		0						0			
Note   Semiple	Pacific Golden-Plover	bf	0		0	0								
Red Phalarope	Snowy Plover	b	u	u	u	u	b					-		
Piping Plover*   Silleder	Wilson's Plover			1			xb		bo	c		c	O	
Piping Plover*	Semipalmated Plover	b	c		c	u		Red Phalarope	O	0	4	O		
Mountain Plover					1									
Mountain Plover		fb	c	c	c	c	b	Gulls, Terns and Skuas						
Sabine's Gull								Black-legged Kittiwake	0		3	0	0	
Oystercatchers American Oystercatcher American Oystercatcher  I								Sabine's Gull	0	0	6	r		
Dystercatchers	24140141120000101					-		Bonaparte's Gull	ob	c	r	c	u	
American Oystercatcher    1	Ovstercatchers													
Stilts and Avocets Black-necked Stilt   bmf   a   a   a   a   b   Franklin's Gull   fb   r   o   r   American Avocet   bm   a   c   a   a   b   Franklin's Gull   fb   r   o   r   American Avocet   bm   a   c   a   a   b   Franklin's Gull   fb   r   o   r   American Avocet   bm   a   c   a   a   b   Heermann's Gull   obb   o   o   o   o   b+  Sandpipers and Phalaropes Spotted Sandpiper   b   u   u   u   u   Western Gull   obb   o   o   o   o   o   o   Solitary Sandpiper   m   o   r   3   Yellow-footed Gull   obb   o   o   o   o   o   Spotted Redshank   1   V   V   California Gull   obb   o   o   o   o   Spotted Redshank   1   V   V   American Herring Gull   ob   o   o   o   o   Willet   b   c   o   c   c   Thayer's Gull   ob   o   o   o   o   Willet   b   c   u   c   a   Glaucous-winged Gull   ob   o   o   o   o   Whimbrel   fb   c   u   c   a   Glaucous-winged Gull   ob   o   o   o   Whimbrel   fb   c   u   c   a   Glaucous-winged Gull   ob   o   o   o   Whimbrel   foot   o   Gull-billed Tern   ob   o   o   o   Surfoird   b   1   o   Black Tern   ob   c   c   o   o   Surfoird   b   1   o   Black Tern   ob   c   c   o   o   Semipalmated Sandpiper   o   v   o   Arctic Tern   ob   c   c   c   c   u   Semipalmated Sandpiper   o   v   o   Forster's Tern   ob   c   c   c   c   u   Semipalmated Sandpiper   o   v   o   Forster's Tern   ob   c   c   c   c   u   Semipalmated Sandpiper   o   v   o   Forster's Tern   ob   c   c   c   c   u   Semipalmated Sandpiper   o   v   o   Forster's Tern   ob   c   c   c   c   u   Semipalmated Sandpiper   o   v   o   Forster's Tern   ob   c   c   c   c   u   Semipalmated Sandpiper   o   v   o   Forster's Tern   ob   c   c   c   u   Set   o   v   v   v   v   v   v   v   v   v				1					b	0	0	0		
Stilts and Avocets Black-necked Stilt bmf a a a a b Franklin's Gull fb r o r American Avocet bm a c a a b Heermann's Gull ob o o o o b+  Sandpipers and Phalaropes Spotted Sandpiper b u u u u Western Gull ob o o c c r Solitary Sandpiper m o r 3 3 Yellow-footed Gull ob o c c c r Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob o c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c b Spotted Redshank 1 American Herring Gull ob c c c c c b Spotted Redshank 1 American Herring Gull ob c c c c c b Spotted Redshank 1 American Herring	Time rear of stereuterer			-							0		0	
Black-necked Stilt bmf a a a a b b Franklin's Gull fb r o r bm a c a a b bmerican Avocet bm a c a a b Heermann's Gull ob o o o o b+ Mew Gull ob o o o o b+ Mew Gull ob o o o r r s Sandpipers and Phalaropes  Spotted Sandpiper bb u u u Western Gull bo o c c a a a Solitary Sandpiper m o r o California Gull ob o c c c c b Spotted Redshank 1 Spotted Redshank	Stilts and Avocets								ohf	0	c		0	nh+
American Avocet   bm   a   c   a   a   b   Heermann's Gull   ob   o   o   o   o   o   b +		bmf	a	a	a	a	b						U	poi
Sandpipers and Phalaropes Spotted Sandpiper By U Solitary Sandpiper By U Surfbird Bridged Turnstone Black Turnstone Black Turnstone Banderling Bridged By U														bi
Sandpipers and Phalaropes Spotted Sandpiper Solitary Sandpiper Solitar	11110110111111110000				-	-	~					0		D+
Spotted Sandpiper b u u u Western Gull bo o o c c r p Wandering Tattler b o o c c c r p Wandering Tattler b o o c c c b Spotted Redshank 1	Sandniners and Phalarones													
Solitary Sandpiper m o r 3 Yellow-footed Gull ob o c c r p Wandering Tattler b o o o o California Gull obf c c c c b Spotted Redshank 1 American Herring Gull ob u o c c willet b c r c c California Gull ob o o c c c Thayer's Gull ob o o c c c Thayer's Gull ob o o c c c Thayer's Gull ob o o o r c c Thayer's Gull ob o o o r c c Glaucous-winged Gull ob o o o r c c Glaucous-winged Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Glaucous Gull ob o o o c c c c Gull-biled Tern ob o c c c a u b Glaucous Gull ob o o o c c c c c c c c c c c c c c c		b	11		11	11								
Wandering Tattler  b o o o California Gull  California Gull  American Herring Gull  American Herring Gull  b o o c c c  Thayer's Gull  b o o o o o o o o o o o o o o o o o o														
Spotted Redshank Greater Yellowlegs bmf c o c c c Willet b c r c c Lesser Yellowlegs bmf u c u c Whimbrel Long-billed Curlew Hudsonian Godwit Hudsonian Godwit Bridled Tern  Marbled Godwit Black Turnstone Black Turnstone Black Turnstone Black Knot Surfbird Red Knot Sanderling Bridled Sandpiper Bush a u  Calmornia Gull American Herring Gull Ob u o c Thayer's Gull Ob u o c C Thayer's Gull Ob o o o C C Thayer's Gull Ob o o o C C Thayer's Gull Ob o o C C Thayer's Gull Ob o o C C C Selacucus-winged Gull Ob o o C C C C C C C C C C Selacucus Gull Ob o C C C C C C C C C C C C C C C C C C C												c		
Greater Yellowlegs bmf c o c c Thayer's Gull ob o r Lesser Yellowlegs bmf u c u Glaucous-winged Gull ob o o o r Long-billed Curlew fb c u c a Hudsonian Godwit b c u c c Greated Tern bf c c o c Black Turnstone b r 3 o o Gull-billed Tern bf c c o c a Usuffix Turnstone b o c c o c a Ruddy Turnstone b o c c o c a Ruddy Turnstone b o c c o c a Ruddy Turnstone b o c c o c a Ruddy Tern bf c c c o c a Usuffix Caspian Tern bf c c c o c a u b Surfbird b u o r o Common Tern b c c c u b Western Sandepiper b a a u					0	0				c	c	c	c	b
Willet b c r c c Lesser Yellowlegs bmf u c u Glaucous-winged Gull ob o o o o Glaucous-winged Gull ob o o o o o Glaucous Gull ob o o o o o Glaucous Gull ob o o o o o Glaucous Gull ob o o o o o o Glaucous Gull ob o o o o o o o o o o o o o o o o o		hmf		0	c	c			ob	u	0	c	c	
Lesser Yellowlegs bmf u c u Glaucous-winged Gull ob o o o r Glaucous-winged Gull ob o o o r Glaucous-winged Gull ob o o o r Glaucous Gull ob o o o Bridled Tern 1 Least Tern ob o o o Gull-billed Tern bf c c o o 5 b Gull-billed Tern ob c c o a u b Glaucous Gull ob o o o Gull-billed Tern ob o o o o o o o o o o o o o o o o o o		-							ob	O			r	
Whimbrel fb c o c 8 Long-billed Curlew fb c u c a Glaucous-winged Gull ob o o r Hudsonian Godwit 1 1 1 Marbled Godwit b c u c c Least Tern ob o o Ruddy Turnstone b r 3 o o Gull-billed Tern bf c c o 5 b Black Turnstone b o 2 o 3 Surfbird b 1 o Black Tern ob c c a u b Surfbird b u o r o Common Tern ob o r Sanderling b u r o Arctic Tern ob c c c u b Western Sandpiper b a a a u			-	1				Lesser Black-backed Gull	ob	0		0	0	
Long-billed Curlew fb c u c a Bridled Tern 1  Marbled Godwit b c u c c Least Tern ob o o Ruddy Turnstone b r 3 o o Gull-billed Tern bf c c o 5 b Black Turnstone b o 2 o 3 Caspian Tern ob c c a u b Surfbird b 1 o Black Tern ob o r a Red Knot b u o r o Common Tern ob o r Sanderling b u r o Arctic Tern ob c c c u b Western Sandpiper b a a a u				0				Glaucous-winged Gull	ob	0	0		$\mathbf{r}$	
Hudsonian Godwit  Marbled Godwit  b c u c c  Ruddy Turnstone  b r 3 0 0 Gull-billed Tern  Black Turnstone  b o 2 0 3  Caspian Tern  bf c c 0 5 b  Caspian Tern  Black Tern  bf c r a  Red Knot  Black Tern  Common Tern  Sanderling  b u r o Arctic Tern  Semipalmated Sandpiper  b a a u  Bridled Tern  Least Tern  bf c c 0 5 b  Caspian Tern  bf c r a  Red Common Tern  c o c o 6  Forster's Tern  c o c c u b  Western Sandpiper								Glaucous Gull	ob				0	
Marbled Godwit b c u c c Least Tern ob o o Gull-billed Tern bf c c o 5 b Gull-billed Tern bf c c c c o 5 b Gull-billed Tern bf c c c c o 5 b Gull-billed Tern bf c c c c o 5 b Gull-billed Tern bf c c c c		10		и		а		Bridled Tern			1			
Ruddy Turnstone b r 3 o o Gull-billed Tern bf c c o 5 b Black Turnstone b o 2 o 3 Caspian Tern ob c c a u b Surfbird b 1 o Black Tern bf c r a Red Knot b u o r o Common Tern ob o r Sanderling b u r o Arctic Tern ob c c c u b Western Sandpiper b a a u		h		11		0			ob	0				
Black Turnstone b o 2 o 3 Caspian Tern ob c c a u b Surfbird b 1 o Black Tern bf c r a Red Knot b u o r o Common Tern ob o r Sanderling b u r o Arctic Tern ob c c c u b Western Sandpiper b a a u		_										0	5	h
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_												
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				4		0							и	D
Sanderling b u r o Arctic Tern o o o 6 Semipalmated Sandpiper b r o Forster's Tern ob c c c u b Western Sandpiper b a a u				_							1			
Semipalmated Sandpiper b r o Forster's Tern ob c c c u b Western Sandpiper b a a u				0					OD					C
Western Sandpiper b a a u		-				0			1					
The state of the s								Forster's Tern	ob	c	c	c	u	b
Little Stint 1 Gulls, Terns and Skuas continued on next page		b			a	u								
	Little Stint		1					Gulls, Terns and Skuas continued on a	rext page					

Common Name F	Sp	S	F	W	N	Common Name	Н	Sp	S	F	W	N
Gulls, Terns and Skuas continued			10.0		T., FD	Hummingbirds		- 10				
						Broad-billed Hummingbird		1				
Royal Tern		4					h		- 11			h
Elegant Tern o		0				Black-chinned Hummingbird		u	u			b
Black Skimmer o	) c	c	c	4	b	Anna's Hummingbird	hs	u	u	u	u	b
Pomarine Jaeger	3	0	2	1		Costa's Hummingbird	hs	u	u	r	r	b
Parasitic Jaeger		0	1			Calliope Hummingbird	hs	r				
Long-tailed Jaeger			0			Rufous Hummingbird	h	u		r		
Bong tuned sueger						Allen's Hummingbird		6		2		
Auks, Murrelets and Puffins												
Ancient Murrelet	1	2				Kingfishers						
Ancient Murrelet	1	4				Belted Kingfisher	brm	u		c	c	
Pigeons and Doves												
Rock Dove	c	c	c	c	b	Woodpeckers						
Band-tailed Pigeon	1		4	3	11-16-1	Lewis's Woodpecker	h	0		0	0	е
Eurasian Collared Dove		c	c	c	b	Red-headed Woodpecker			1			
Spotted Dove		1	-	1	xb+	Acorn Woodpecker			1	4	3	
White-winged Dove fs	n c	c	r	0	b	Gila Woodpecker	h	u	u	u	u	b.
					b	Williamson's Sapsucker	11	и	и	и	1	D.
		a	a	a	b					1		
Inca Dove		С	c	c		Yellow-bellied Sapsucker	,			1	7	
Common Ground-Dove si		С	c	С	b	Red-naped Sapsucker	hr	$\mathbf{r}$		r	r	
Ruddy Ground-Dove	0	0	0	0	lb+	Red-breasted Sapsucker	hr			0	0	
						Ladder-backed Woodpecker	sh	u	u	u	u	b
Cuckoos						Nuttall's Woodpecker				1		
Yellow-billed Cuckoo		0				Northern Flicker	hs	c		c	c	
Greater Roadrunner s	u	u	u	u	b							
Groove-billed Ani			1			Tyrant Flycatchers						
						Olive-sided Flycatcher	hrs	r		0		
Barn Owls						Greater Pewee	111.0	•		1		
Barn Owl h	f u	u	u	u	b	Western Wood-Pewee	hrs					
							ms	C		u		
Typical Owls						Yellow-bellied Flycatcher				1		
Flammulated Owl			1			Alder Flycatcher				1		
Western Screech-Owl	r	r	r	r	lb	Willow Flycatcher	$^{\mathrm{rh}}$	c		u		
Great Horned Owl h		r	r	r	b	Least Flycatcher				1	1	
Elf Owl			1	1	· ·	Hammond's Flycatcher	$^{\mathrm{rh}}$	u		r		
Burrowing Owl	c	c	c	c	b	Dusky Flycatcher	hs	0		0		
		C			D	Gray Flycatcher	hs	r		0	0	
Long-eared Owl Short-eared Owl f			0	0		Pacific-Slope Flycatcher	hrs			u	1	
	0		r	r		Black Phoebe	hfm		c	c	c	b
Northern Saw-whet Owl			1	1		Eastern Phoebe	rh	C	C		0	D
0										0		l.
Goatsuckers					SERVI I	Say's Phoebe	h	u	0	c	c	b
Lesser Nighthawk at		С	u	0	b	Vermilion Flycatcher	h	0	0	r	r	xk
Common Poorwill s	0		0			Dusky-capped Flycatcher	_				6	
Whip-poor-will			1			Ash-throated Flycatcher	hrs	c	O	u	O	
						Brown-crested Flycatcher			1			
Swifts						Tropical Kingbird				4	2	
Black Swift	5	1				Cassin's Kingbird	hf	a		c	c	
Chimney Swift		1				Western Kingbird	hf	c	c	u	a	b
	u	-	u			Western Enignitu	111	C	C	u	а	I.
Vaux's Swift												

Common Name H	Sp	S	F	W	N		Common Name	Н	Sp	S	F	W	N
Tyrant Flycatchers continued					11/5		Bewick's Wren	rsh	H.		r	r	
Eastern Kingbird hf	0		0				House Wren	rsh	r		u	u	
Scissor-tailed Flycatcher	1		1				Winter Wren	r			0	0	
	1		1				Marsh Wren	m	c	c	c	c	b
Shrikes							Kinglets						
Loggerhead Shrike sf	0	O	u	u	b		Golden-crowned Kinglet	r			0	0	0
Northern Shrike				2			Ruby-crowned Kinglet	rh	u		0	o c	е
Vireos							Ruby-crowned Kinglet	111	u		C	C	
Bell's Vireo rs			0	0			Gnatcatchers						
Plumbeous Vireo hr			0	0		1	Blue-gray Gnatcatcher	rs	u		u	u	
Cassin's Vireo hr			r	1			Black-tailed Gnatcatcher	S	u	u	u	u	b
Hutton's Vireo			1	_			TI						
	ı c		u	2		(	Thrushes	1					
Red-eyed Vireo			2				Western Bluebird	sh			r	r	е
			,1-1				Mountain Bluebird	f			u	u	е
Jays, Magpies and Crows							Townsend's Solitaire	rh	1	_	0	0	
Western Scrub-Jay hrs	3		0	0	е		Swainson's Thrush	rh	u	1	0		
Pinyon Jay				2			Hermit Thrush	$^{\mathrm{rh}}$	r		r	r	
American Crow hf			0	O	е		Rufous-backed Robin				1	1	
Common Raven fa	r	O	u	u	b		American Robin	h	u		u	u	е
Larks							Varied Thrush				4	2	
Horned Lark f	u	u	c	c	b		<b>Mockingbirds and Thrashers</b>						
							Gray Catbird		1		1		
Swallows							Northern Mockingbird	hs	c	c	c	c	b
Purple Martin a	O		0				Sage Thrasher	sf	r	C	0	0	
Tree Swallow a	С	O	c	С			Brown Thrasher	51	1		O	3	
Violet-green Swallow a	r		0		1		Bendire's Thrasher				1	3	
Northern Rough-winged Swallow a	С	c	c	u	b		Curve-billed Thrasher					4	
Bank Swallow a Cliff Swallow a	u		r	r	1.		Crissal Thrasher	S	r	r	r	r	b
Cliff Swallow a Cave Swallow	c 3	c	c		b		Le Conte's Thrasher		1	1		1	xb
D 0 11			1 a	.,,	b+		Le conce s in asier						24.0
Barn Swallow a	С	r	a	u	D+		Starlings						
Chickadees and Titmice							European Starling	hf	c	С	c	c	b
Mountain Chickadee			1	1			Westeile and Dinite						
Oak Titmouse				1			Wagtails and Pipits	c					
Verdin							American Pipit	$_{ m f}^{ m f}$	r		c	a	
YY 11	0	0	0		b	.9	Sprague's Pipit	1	0		0	0	
	С	c	С	С	D	-7	Waxwings						
Nuthatches							Cedar Waxwing	h	r		r	r	е
Red-breasted Nuthatch h			r	r	е								
White-breasted Nuthatch			7	1		9	Silky-Flycatchers						
Creepers							Phainopepla	S	u	0	u	С	
Brown Creeper hr			0	0			Wood Warblers						
			U	0			Blue-winged Warbler				1		
Wrens							Tennessee Warbler		3		1	1	
Cactus Wren sh	u	u	u	u	b		Orange-crowned Warbler	rsh			c	c	
Rock Wren s			r	r			Nashville Warbler	rsn				0	
Canyon Wren			1				Virginia's Warbler	111	1		r 4	2	
							0		1		4	4	
							Wood Warblers continued on next page						

Common Name	Н	Sp	S	F	W	N	Common Name	Н	Sp	S	F	W	N
Wood Warblers continued		- 1				15	Lark Sparrow	hf	u	u	u	u	b
I novia Warbler	**			_		l	Black-throated Sparrow	S			0		
Lucy's Warbler Northern Parula	r	0	0	0		b+	Sage Sparrow	S	r		r	$\mathbf{r}$	
	rh	0		0	0		Lark Bunting	S	0			O	
Yellow Warbler	rsh	c		c	0		Savannah Sparrow						
Chestnut-sided Warbler	rh			0	0		Savannah Sparrow	f	c		a	a	
Magnolia Warbler				5	0		"Large-billed Sparrow"	b		$\mathbf{r}$	u	u	
Cape May Warbler				2	2		Grasshopper Sparrow	f	0		0	0	
Black-throated Blue Warbler	1			4			Le Conte's Sparrow					1	
Yellow-rumped Warbler	rsh			a	a		Fox Sparrow	$^{\mathrm{rh}}$	0		0	0	
Black-throated Gray Warbler	$^{\mathrm{rh}}$	C		u	0		Song Sparrow	rm	c	С	c	c	b
Black-throated Green Warbler		1					Lincoln's Sparrow	rs	u		u	u	
Townsend's Warbler	rh	u		ľ	0		Swamp Sparrow	m	0		0	0	
Hermit Warbler	rh	r		0			White-throated Sparrow	hrs	0		0	0	
Blackburnian Warbler				2			Harris' Sparrow	hrs	0		0	0	
Yellow-throated Warbler					1		White-crowned Sparrow	hrs	c		c	c	
Pine Warbler				1			Golden-crowned Sparrow	hrs	0		0	0	
Prairie Warbler				2			Dark-eyed Junco	hrs	r		r	r	
Palm Warbler	r	0		0	0		McCown's Longspur	f				0	
Bay-breasted Warbler		1					Lapland Longspur	f				r	
Blackpoll Warbler		1					Smith's Longspur					2	
Cerulean Warbler				1			Chestnut-collared Longspur	f				r	
Black-and-white Warbler	rh	O		0	0		Chestitat contact Bongspar	_				-	
American Redstart	$\mathbf{r}$	0		r	r		<b>Grosbeaks and Buntings</b>						
Prothonotary Warbler				1			Pyrrhuloxia		1	1		2	
Ovenbird		2		3	2		Rose-breasted Grosbeak	h	0		0		
Northern Waterthrush	r		0	0			Black-headed Grosbeak	hr	c	0	u		
MacGillivray's Warbler	rsh	u		ľ			Blue Grosbeak	rs	u	u	u	1	b
Common Yellowthroat	rm	c	c	c	c	b	Lazuli Bunting	rs	c		u	_	
Hooded Warbler		1					Indigo Bunting	rs	0		0	1	
Wilson's Warbler	rsh	c		c	0		Painted Bunting	10	0		4	1	
Painted Redstart				2	2		Dickcissel				1	•	
Yellow-breasted Chat	rs	r	r	r		b	Dicheisser				•		
							<b>Blackbirds and Orioles</b>						
Tanagers							Bobolink		1	1	2		
Summer Tanager	h	O		0	O		Red-winged Blackbird	fm	a	a	a	a	b
Western Tanager	hrs	c		u			Tricolored Blackbird	f	0		0	0	
							Western Meadowlark	f	c	c	c	c	b
Emberizids							Yellow-headed Blackbird	mf	u	u	u	u	b
Green-tailed Towhee	S	r		$\mathbf{r}$	O		Brewer's Blackbird	hf	u	u	c	c	b
Spotted Towhee	sh	O		r	r		Common Grackle		1			1	
Abert's Towhee	hrs	c	c	c	С	b	Great-tailed Grackle	hfm	a	a	a	a	b
American Tree Sparrow					5		Bronzed Cowbird	h	r	r	0		b
Chipping Sparrow	sh	u		u	r		Brown-headed Cowbird	fhr		c	c	c	b
Clay-colored Sparrow		4		2	1		Orchard Oriole	1111			3	4	2
Brewer's Sparrow	S	c		c	С		Hooded Oriole	h	r	r	r		b
Black-chinned Sparrow		3		3			Baltimore Oriole	h	0	1	0		b
	sf	u		u	u		Bullock's Oriole	hr	c	u	u	0	b
Vesper Sparrow	B. J. M.												
vesper sparrow	DI						Scott's Oriole	h	C	и	0	0	

Common Name	Н	Sp	S	F	W	N
Finches						
Purple Finch	$^{\mathrm{rh}}$				0	
Cassin's Finch	$^{\mathrm{rh}}$				0	
House Finch	hs		c		c	
Red Crossbill	h				0	
Pine Siskin	rsh				ľ	
Lesser Goldfinch	hs		$\mathbf{r}$		u	
Lawrence's Goldfinch	S				0	
American Goldfinch	hs				ľ	
Evening Grosbeak					1	
Old World Sparrows	1					
House Sparrow	h		C		С	

#### **Mammals of the Refuge**



All mammals listed are considered resident species with the exception of the bats, which migrate on a seasonal basis like many of the birds.

### Shrews (family Soricidae)

Desert Shrew (Notiosorex crawfordi)
This tiny, long-snouted mammal hunts for insects in woodrat nests and piles of debris at the base of desert plants.

## **Leaf-nosed Bats** (family Phyllostomatidae)

Mostly a tropical group, leaf-nosed bats are distinguished by their large eyes, and leaf-shaped flap on their noses. They are the only bats seen here that hover when feeding.

California Leaf-nosed Bat (Macrotus californicus)
An insect eater, this bat will hover above the ground and then swoop down to seize its prey.

Mexican Long-tongued Bat (Choeronycteris mexicana)
This bat uses its long tongue, tipped with a brush of fleshy projections, to feed on pollen and nectar.

### Evening Bats (family Vespertilionidae)

Most North American bats are members of this family, distinguished by small eyes, short tail, and a fleshy projection, or tragus, inside the ear. They typically emerge from their roosts in the evening to feed on flying insects. Most have an erratic flight pattern with many sudden turns.

California Myotis (Myotis californicus)
This small, agile bat can veer suddenly sideways, up, and down.

Western Pipistrel (Parastrellus hesperus)
Smallest bat in the U.S., with an 8-inch wingspan. Its flight is weak, erratic, like that of a moth.

Big Brown Bat (Eptesicus fuscus)
Recognizable by its large size (wingspan 12-13 inches), relatively slow wingbeats, and audible chatter.

Hoary Bat (Lasiurus cinereus)
This large, rare bat (wingspan to 16 inches) is a strong and fast flier; a winter migrant to this area. The only bat with white-tipped hairs.

Western Yellow Bat (Lasiurus xanthinus)
A large, rare, yellowish-buff bat that roosts in trees.

Spotted Bat (Euderma maculatum)
This rare species is the only U.S. bat with white spots. When resting it curls up its long ears.

Pallid Bat (Antrozous pallidus)
The only large, big-eared bat with pale fur. Unique among evening bats, it takes scorpions and large insects from the ground.

**Free-tailed Bats** 

(family Molossidae) These bats have long, narrow wings; fast, direct flight; and long tails, which extend well beyond the membrane connecting the hind legs. The species are difficult to tell apart, but the Brazilian Free-tailed Bat is the most common in our area.

Mexican Free-tailed Bat (Tadarida brasiliensis)

Pocketed Free-tailed Bat (Nyctinomops femorosacca)

Big Free-tailed Bat (Nyctinomops macrotis)

**Rabbits and Hares** 

(family Leporidae) Desert Cottontail (Sylvilagus audubonii)
Desert cottontails generally stay close to cover, but will use burrows of other animals in areas of sparse vegetation.

Squirrels

(family Sciuridae) Round-tailed Ground Squirrel (Spermophilus tereticaudus)
Active in mornings and evenings. It holds its thin tail over its back when running.

**Pocket Gophers** 

(family Geomyidae) Botta's Pocket Gopher (Thomomys bottae)

These burrowing rodents have large yellow incisors which are always exposed, since the lips close behind them. They feed on roots, and also cut off stems below ground and then pull the plant into the burrow from below.



Pocket Mice and Kangaroo Rats

(family Heteromyidae) These rodents have large, fur-lined cheek pouches, and derive all the moisture they need from seeds. Kangaroo rats have long hind legs and a tuft of white hair on the ends of their long tails. Compared to other mice, pocket mice have relatively smaller ears, shorter snouts, and longer hind feet and tails. Both pocket mice and kangaroo rats are strictly nocturnal, and often seen on roads at night.

Little Pocket Mouse (Perognathus longimembris)

Long-tailed Pocket Mouse (Chaetodipus formosus)

Desert Pocket Mouse (Chaetodipus penicillatus)

Spiny Pocket Mouse (Chaetodipus spinatus)

Desert Kangaroo Rat (Dipodomys deserti)

Merriam's Kangaroo Rat (Dipodomys merriami)

New World Rats and Mice

(family Cricetidae) Cactus Mouse

(Peromyscus eremicus)
Pale gray with large ears; nests in clumps of cactus, rock piles, and abandoned burrows.

Deer Mouse (Peromyscus maniculatus) Grayish-brown above, white below, with large ears and eyes.

Hispid Cotton Rat (Sigmodon hispidus)
Common in agricultural fields and moist habitats. They have coarse, long fur that nearly hides their ears.

New World Rats and Mice continued on next page

Opposite: Baby desert cottontails huddle together in the protection of their soft grass and fur lined nest.

New World Rats and Mice continued

White-throated Woodrat (Neotoma albigula)
With their large ears and eyes and silky fur, woodrats resemble

and silky fur, woodrats resemble overgrown deer mice. Nicknamed "packrats," they carry various objects into their burrows, which are hidden under large piles of sticks, cactus parts, and other debris.

Desert Woodrat (Neotoma lepida)
The two species are similar, but the Desert Woodrat is paler in color.

Muskrat
(Ondatra zibethicus)
Muskrats build lodges of mud and
marsh plants in freshwater wetlands.
Webbed hind feet and flattened tails
make them excellent swimmers.

Old World Rats and Mice (family Muridae) Black Rat (Rattus rattus)

Omnivorous, but partial to grain, this rat is an excellent climber. Nests are sometimes made in tangled vines and trees.

Norway Rat (Rattus norvegicus)
Larger and more aggressive than the Black Rat. Females may bear up to 12 litters per year of 2 to 22 young.

An unusual daytime sighting of the desert kit fox

 $Joe\ Engler/USFWS$ 

House Mouse (Mus musculus)
It makes its own nest but lives in groups, sharing escape holes and eating areas.





A coyote wanders the wetlands.

**Bobcat** (family Felidae)

Bobcat (*Lynx rufus*)

Highly adaptable to its environment, this crepuscular predator maintains a well-defined territory and will hunt a variety of prev.

Wolves, Foxes and the Coyote (family Canidae) Coyote (Canis latrans)

Distinctive howls help coyotes track each others' location and reunite members of a band. Doglike droppings full of hair are clues to their presence.

Desert Kit Fox (Vulpes macrotis)
This pale, large-eared fox is a solitary nocturnal predator.

Raccoon, Ringtail and Coati

(family Procyonidae) (Procyon lotor)
The raccoon is a solitary, nocturnal opportunist, common in wetland areas and near human habitation.

Weasels, Skunks, Badgers, Otters and Allies (family Mustelidae)

Badger (Taxidea taxus)

Raccoon

A powerful digger, this animal feasts mainly on small mammals.

Western Spotted Skunk (Spilogale gracilis)
Faster and more agile than the larger skunks, it also is a good climber.

Striped Skunk (Mephitis mephitis)
The only serious predator of this skunk is the Great Horned Owl.

#### **Amphibians, Reptiles and Fish**

#### **Amphibians**



The name amphibian means "double life" and refers to the fact that most amphibians spend part of the year on land but return to water to breed. It also reflects the change of an aquatic tadpole to a terrestrial adult frog or toad. In the spring and early summer look for them gathering in shallow ponds where they mate and lay eggs.

**Frogs and Toads** 

Woodhouse Toad Red-spotted Toad Bullfrog

Reptiles

Reptiles are egg laying animals that are protected by scales or horny plates. Most are found in brushy areas on the refuge and surrounding desert habitats. The exception to this is the Spiny Softshell turtle, which is found near water.

**Turtles** 

Spiny Softshell

Lizards

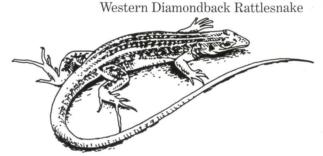
Long-nosed Leopard Lizard Desert Spiny Lizard Side-blotched Lizard Long-tailed Brush Lizard Flat-tailed Horned Lizard Western Whiptail

Snakes

Western Blind Snake Coachwhip

Western Patch-nosed Snake

Glossy Snake Gopher Snake Common Kingsnake Long-nosed Snake Checkered Garter Snake Ground Snake



#### Fish



Very few fish can tolerate the high salinity of the Salton Sea. In 1950 attempts were made to introduce several marine fish. These attempts resulted in the largest inland fishery in California. Freshwater species are found in rivers, canals and some marsh areas.

#### **Freshwater Fish**

Threadfin Shad Carp Red Shiner Channel Catfish White Catfish Largemouth Bass Mosquitofish Sailfin Molly Desert Pupfish\*

#### Saltwater Fish

Tilapia



Western diamondback rattlesnake in a defensive posture. Gary Kramer/USFWS

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http://www.fws.gov/refuge/sonny\_bono\_salton\_sea

U.S. Fish & Wildlife Service http://www.fws.gov

Refuge Information 1 800/344 WILD

This brochure is available in alternative format upon request.





March 2014

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 $\begin{array}{l} \textit{Cover photograph: Black necked stilt,} \\ @\textit{Jenny E. Ross/www.jennyross.com} \end{array}$ 

U.S. Fish & Wildlife Service

# Sonny Bono Salton Sea

National Wildlife Refuge

 $Wildlife\ List$ 



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