The sapphire blue water of the Salton Sea reaches toward lofty snow-capped peaks that crown the western horizon. To the east lies the desert, parched and relentless. Vast sand plains stretch monotonously toward the Chocolate Mountains, shimmering in a haze of lavender and purple. Between this blazing inferno and the salty sea lies the Imperial Wildlife Area—a slender wetland oasis that offers winter respite to birds from the Arctic and the Argentine plains.

### History

The Imperial Valley is a great U-shaped trough formed by a trio of natural forces—water, earthquakes and time. Active faults stretch across its scarred earthen mantle. Water has inundated the area several times. Long ago, it was part of the Gulf of Baja California. The ancient shoreline is still visible and embedded with tiny shells from another era.

Over time, sediment deposits from the Colorado River formed a barrier to the Gulf. Fresh water filled the basin and Lake Cahuilla was born. The lake endured until 300 or 400 years ago, when changing climate cycles dried it permanently.

Without water, the area reverted to desert—a place where the unrelenting sun produced vegetation armored by rows of thorns. Salt flats stretched for miles and by the early 1900s, enterprising men, aided by a railroad, mined the precious white mineral.

The Colorado River was eventually diverted to irrigate and transform this arid land. Ironically, in 1905, the mighty river breached the feeble dikes containing it and carved a new course, ending in the Salton basin. It took two full years to stop this temporary diversion but the result was permanent: the Salton Sea.

Once the Salton Sea formed, it became a winter refuge for many migratory birds. The water that so transformed the land for wildlife allowed agriculture to thrive as well. In little time, waterfowl were consuming lettuce and other crops intended for the marketplace.
The Imperial Wildlife Area was created in 1954 in order to safeguard habitat for migratory birds, alleviate crop damage to adjacent farms and to offer some unique recreation opportunities to Californians. Facilities at the area include roads, parking areas, portable restrooms, flat hiking trails, public phones, primitive camping, maps, bird check lists, and a special viewing platform is available. Drinking water, however, is not available.

**Desert oasis boasts 400 different species**

A long, narrow sliver sandwiched between the desert and a sea saltier than the ocean, the Wister Unit of Imperial Wildlife Area is nothing less than remarkable. It covers over 6,000 acres, all located 200 feet or more below sea level and is known for its two seasons: summer and the rest of the year!

Even so, Imperial probably boasts the highest species count of all wildlife areas—nearly 400 different species can be found here. This human-made marsh provides absolutely essential habitat for migratory birds navigating the Pacific Flyway.

The Wister unit is located on a gentle slope, where 189 miles of levees and 27 miles of canals form terraces between seasonally flooded ponds and fields. The fresh Colorado River water for the ponds is pumped to Wister from out of the Coachella Canal.

Hike some of the levees bordered by bulrush and cattail and marvel at the incredible views of wildlife. Travel the 36 miles of roads that slice across the area; there are frequent parking areas and several access points to the Salton Sea.

The sea forms the entire western boundary, a line that shifts as agricultural runoff changes. Salts in the runoff also account for the ever-increasing salinity of the sea. During times of drought, the Imperial Irrigation District may reduce flows, causing the Salton Sea to recede and saline concentrations to increase even more. This makes the wildlife area's fresh water ponds bordering the Sea even more crucial for wildlife. Most species must have sources of fresh water to survive.

**Fantastic birding**

When it comes to birdlife, Imperial Wildlife Area is a crossroads for birds from the north and the Pacific Ocean and some unusual varieties from the south. Dozens of species of shorebirds work the mudflats or hide among the cattails. Waterfowl and geese form dark masses upon the water.
There are upland birds and raptors among the short grasses. Listen to the roar of feathered wingbeats as waterfowl move from pond to pond.

The tranquility and raw beauty of the area have drawn visitors for decades — birders, hunters and anglers. Camping is also allowed, the kind that attracts people who’ll forgo lots of amenities in exchange for the pure simplicity of a desert marsh. Visitors must remember to provide their own water, however. Potable drinking water is not available on the area.

**Mudpots underscore geothermal activity in area**

The earth relieves pressures that develop beneath its mantle in a variety of spectacular and subtle ways. Volcanoes spew molten lava, moving tectonic plates produce earthquakes and geysers emit a gush of boiling water. In the Imperial Valley, subterranean forces are expressed more gently in the form of mudpots.

Here, earthquake faultlines are marked by a series of bubbling pools of mud. This unusual effervescence is produced by carbon dioxide, which rises from below the water table. As the escaping gas is vented, it mixes with surface water and soil to produce a cool, bubbling mixture of mud.

Imperial Wildlife Area has the largest concentration of mudpots in the entire Valley. Some believe the carbon dioxide is the result of super-heated steam on sedimentary carbonate rocks; others feel that the gas is simply a component of the volcanic bedrock. Whatever the explanation, these curiosities of nature are often surrounded by knots of people fascinated by the unusual geothermal display. Visitors can easily enter the mudpots viewing area which is equipped with special disabled access provisions, including parking.

**Snow Geese a Popular Attraction**

It may announce the beginning of spring to the north, but here, the plucky, orange-breasted American robin is a celebration of fall. Balmy days replace the searing summer weather. More than 90 percent of the area is flooded in the fall; fresh greenery fringes and carpets the ponds. Big flocks and scattered groups of birds arrive in undulating V’s and ragged lines as the coarse cries of mallard, northern pintail and teal echo across the marsh. On many fall days, it’s possible to see 10,000 to 15,000 ducks feeding in W-12...
field, near the intersection of Davis and Beach roads.

As October wanes, a chorus of nasal honking marks the arrival of the first snow geese. In the weeks that follow, the numbers may swell up to 20,000, as wave after wave of these vocal, white geese circle the headquarters building, then fan out into the nearby fields and ponds. A few Canada geese hitch a ride with the group as well.

Not all visitors arrive in noisy flocks or skeins. Day by day, thousands of migratory shorebirds quietly rejoin those that are year-round residents. Sandpipers, killdeer and a smaller look-alike, the semipalmated plover, prowl the mudflats for a meal. There are American avocets and black-necked stilts, dowitchers and snipe. White-faced ibis move in undulating flight over the water and land on stilt-like legs. Their upper feathers shine iridescent green and violet in the sun.

Noisy groups of yellow-headed blackbirds gather in fields of cultivated barley and oats that are scored by the runways and burrows of harvest mice and kangaroo rats. Sometimes, hundreds of birds join in a loud and nasal chorus. Above the fields, a northern harrier may cruise in lazy, effortless flight or perform acrobatic pull-ups, wing-overs and drop-pounces as it hones in on prey. This medium-sized raptor with the whitensh patch has an owl-like facial disk that also directs the slightest squeaking noises to its sensitive ears. Several varieties of owl patrol the fields at night. Visitors should always keep a watchful eye out for peregrine and prairie falcons which often disappear as suddenly as they appear.

**Winter Birding Superb and Weather Is Mild**

Between Mallard Road and Alcott Road at the south, the area teems with winter activity. Heavy concentrations of birds congregate along the shoreline. Evening temperatures dip and occasionally, tiny crystals of frost trace ridges on the grasses. Spectacular storms produce infrequent but dramatic sound and light shows, but the annual rainfall is only three inches per year. Sow and winter to the north increase the number of birds that take refuge in the area.

On the mudflats, an advancing line of shorebirds leaves thousands of wispy tracks. There is a full complement of shorebird species — from the smallest sandpipers to lanky willets. If disturbed, willets often sit together, calling back and forth, until they find a safe place to land.

When flushed, they show a startling, broad whitewing bar.

Heavy concentrations of waterfowl and shorebirds are joined by less common avian types. Cormorant and an occasional osprey work the ponds for fish. While watching, listen for rustling among the tules. The least bittern, a small heron-like bird, is a rarity in other areas but it is fairly common at Imperial Wildlife Area and along the Colorado River.

**Secretive Rails Nest at Wister**

Glorious spring weather is accompanied by spectacular breeding and courtship displays. In April or May, the marsh echoes with the distinctive clattering of Yuma clapper rails, vigorously defending their nesting territory. These secretive, endangered birds have found a haven at Wister and will stay to raise their brood until fall. Many of the shorebirds sit openly on their nests, little more than a depression in the dirt.

Waterfowl sport brilliant plumage and some, like green-winged teals, lavishly court their mates. Others, such as pied-bill grebes, are more secretive. When disturbed, this small, drab diving bird sinks slowly into the pond, leaving barely a ripple. Once the young are born, the hatchlings grab mom by the tail, clamber onto her back and hitch a ride wherever she goes.

Just before sunrise, watch for the silhouettes of owls returning to their roosts. And listen. Red-spotted toads speak from the tules. The insistent crowing of a cock pheasant drifts across the marsh. Yellowthroats, marsh wrens and meadowlarks belt out a chorus of
Huge numbers of American white pelicans glide overhead, as Wister's population swells up to a thousand in the spring. They gather off the Salton Sea shore occasionally, as do a lesser number endangered brown pelicans.

Some of the area's 51 mammal species are conspicuous as well. Raccoons follow their mothers and bold coyotes make no secret of their young pups. The mud records the passing of a bobcat through large, rounded print left behind. Dainty desert cottontails — smaller than cottontails found elsewhere in the state — scamper across the levees and roads.

**White-faced ibis and cattle egret roost size exceeds 10,000 at Finney-Ramer**

Stunning numbers of white-faced ibis and cattle egrets come to roost and nest at the Finney-Ramer Unit each year. Visitors will witness the arrival of 10,000 to 15,000 or more of the magnificent birds at dusk nearly every day year round.

**Summer — The Other Season**

 Summers at Imperial Wildlife Area can be brutal with blistering summer days up to 120 degrees that drive away all but the hardiest, most dedicated human visitors, but not all of the wildlife.

While some ponds are drained and repairs are made, plenty of marsh is maintained for the surprising number of dowitchers, plovers and other shorebirds that remain. Broods of young cinnamon teal and redheads venture out in the cool mornings and evenings. Ruddy duck and cormorant still bob on the salty seawater.

With keen observation, visitors may see tiny burrowing owls that perch on levee banks, posts, or the ground during the day, vigilantly guarding nests tunneled into canal banks and levees. Desert spiny lizards and leopard lizards sun themselves on rocks and trees. The mesquite hummocks, creosote stands and palo verde in the desert beyond also sustain a surprising variety of bird life — great roadrunners, cactus wrens, Gambel's quail and desert black-tailed gnatcatchers.

It is a time of year that draws some unusual species from the Sea of Cortez. The yellow-footed gull and the gull-billed tern are not common in California, but a few arrive at the Salton Sea in July and usually stay until mid-September. Black skimmers that nest in the spring can often be seen during the summer, gliding along the water's surface.

White, long-legged wading birds arrive at Wister carried by slow, measured wingbeats, the sun highlighting their black tails and wingtips. These are wood stork and during the day, they often perch in groups of 50 on trees toward the end of Davis Road.

A summer visit to the Imperial Wildlife Area can yield meaningful experiences but is not to be planned lightly. A good vehicle, plenty of water, appropriate clothing and knowledge of desert survival are a must.

**How to get there**

From Niland, on Highway 111, proceed north 5 miles, then turn west (left) at the sign for the Imperial Wildlife Area/Wister Unit. From Indio, proceed south 50 miles on Highway 111. Go past the fish hatchery turnoff and turn right (west) at the sign. The headquarters building is 0.2 miles ahead. The Finney-Ramer Unit is located three miles south of the city of Calipatria on Highway 111. For more information on Imperial Wildlife Area, call (619) 359-0577.

Most of the facilities and programs at the Imperial Wildlife Area are accessible to visitors with disabilities. Opportunities for nature viewing, photographing, hiking and bird watching are vast. Activities for visitors on the Wister and Finney-Ramer Units include hunting for waterfowl, dove, coots, moorhens, snipe, pheasant, quail, raccoon, and rabbit in season; fishing for catfish, largemouth bass, and bluegill on the wildlife area, and corvina, sago and croaker on the Salton Sea.

Patrick Moore worked for the DFG in Southern California until he recently retired.