

DESERT

BIRD GARDENING



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Published by the
Arizona Native Plant Society
and
Tucson Audubon Society

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INTRODUCTION



White-winged Dove R&NB

This publication on desert bird gardening is a collaborative effort between the Arizona Native Plant Society (ANPS) and Tucson Audubon Society (TAS). The plants described in this booklet were chosen because of their usefulness in attracting birds and because they

are adapted to conditions in the deserts of the Southwest. Forty-five species are included, the vast majority of which are native to the Sonoran Desert region. The remaining are noninvasive exotics from other arid regions. Many of the plants are covered in more depth in other booklets in this ANPS series. In addition to the plants, 24 species of birds commonly seen in Southwestern gardens are described and illustrated. There are many bird field guides on the market for more information on bird identification.

ATTRACTING BACKYARD BIRDS

Attracting backyard birds has become a national pastime and is very popular in the Southwest. However, especially in warm climates, traditional ways of attracting birds (such as putting out birdseed) may be harmful for the birds. Where large numbers of birds congregate at one place, such as a seed feeder, diseases sometimes spread from one bird to another. A more natural way to attract birds is to use appropriate plantings.

What do birds need for survival? No two species have exactly the same requirements, but, like all wildlife, they need food, water, and shelter.

PLANTS FOR FOOD

Different kinds of birds eat different kinds of food. Nectar-feeding birds such as hummingbirds are attracted to tubular flowers, often in the red/orange color range. Many birds, including mockingbirds and thrashers, choose fruits and berries when these are available. Other species, like quail, doves, sparrows, and finches, consume large quantities of seeds.

Finally, insects are a major part of the diet for most birds. While certain insects may not be something you plan to attract to your garden, a healthy garden will have many insects. Besides butterflies, bees, and other pollinators at flowers, innumerable tiny insects will feed on the stems and leaves. Many of these are beneficial, such as lacewings and ladybugs, both of which eat aphids. Most insects rarely do permanent damage to plants, and their numbers are kept in check partly by wild birds.

The use of pesticides in a garden probably will not eliminate all of the insects, but it may be unhealthy for the birds who eat the poisoned insects. Avoid using pesticides.

Although we mention specific foods eaten by birds in this booklet, desert birds are often very adaptable in their diets. In years of little rain, few flowers and seeds are available. In order to survive, birds have learned to eat different kinds of food.

PLANTS FOR SHELTER

Birds need places for nesting, places to hide from predators, and shelter from the weather. Dense trees and shrubs provide cover and shelter. Almost any type of mature tree is an asset in a bird garden. Trees provide nesting places, roosting sites, song perches, and food, either directly through seeds, flowers, or fruit, or indirectly through the insects they attract. Generally, one can attract more birds by planting trees and shrubs with firm, forked branches for nests, and dense foliage for cover. Thorns, especially large ones, are useful for deterring predators.

PROVIDING WATER

Traditional birdbaths with standing water can spread disease among birds. Daily scrubbing of a birdbath may solve this problem, but a better method is to provide moving water. An effective way to do this is a hook-up with your drip irrigation system. Even a slight flow prevents birdbath water from stagnating and reduces the chance that disease-carrying organisms will be spread from one bird to another. The sound of dripping water may also catch the attention of birds as they pass through. Many birds like to bathe in as well as drink from the birdbath. It is important that the water be shallow enough for some of the smaller species. Water can be provided in a simple dish or planter bottom, but be sure to keep it clean.

PLANT SELECTION

In selecting the plants for this booklet, we used the following criteria:

1. Low water use. All the plants included in this booklet are relatively drought tolerant. Those plants requiring more water are so

noted as being suitable for the mini-oasis. Many of these plants will look and grow better if supplemental irrigation is provided during drier periods.

2. Attractiveness to birds. The plants selected are those most often used by birds for either food or shelter.

3. Suitability in terms of temperature extremes. Most of the plants are adapted to the climatic extremes of deserts of the Southwest.

4. Availability. Most plants included in this booklet are carried by many nurseries and/or botanical gardens. A few may require some searching.

In designing any garden, you can hardly go wrong by putting in native species. These plants are already adapted to our local climate, so they don't require intensive care or excessive watering. Native birds and insects are already adapted to these plants and are attracted to them. A bird garden can be almost totally native or it can be a mix of natives and well-chosen exotics that provide a wider range of feeding opportunities. A diversity of plant material with blooms at different seasons can provide year-round food sources.

All plants, including the natives, will need supplemental water in order to become established. Once established (1-2 years), supplemental water may not be necessary. A few of the plant species listed may continue to require watering; this is noted in the plant table at the end of the booklet.

The species of plants in this booklet are arranged in alphabetical order by scientific name. You can locate them by common name using the Table of Contents. Established English names are used for all birds.

DESIGN NOTES

To create a successful bird garden, it is not necessary to pull out your existing plants and start over. Most trees and shrubs provide a certain amount of foliage and cover until new plantings become established. Planting trees and shrubs of different heights will accommodate the preferences of different birds. For example, Gambel's Quail spends most of its time on the ground, so it likes shrubs with low-lying branches. Hawks, on the other hand, spend most of their time on higher perches. They need tall trees from which to spot their prey.

BIRD SELECTION

We have focused on birds that are reasonably common in urban areas of the Southwest. Some species, such as Gambel's Quail, will be mainly present in more open areas or the outskirts of urban areas. Not all birds included in this booklet can be found in all places. For example, Abert's Towhee is a common backyard bird in the Phoenix

and Yuma areas; in Tucson, it is found only in riparian environments.

You may not want to attract all birds to your gardens. European Starling and House Sparrow are non-native birds that nest in cavities, and they often displace our native, cavity-nesting birds. Great-tailed Grackles can be a nuisance, as can Rock Doves (known to most people as Pigeons). Some kinds of raptors, like Cooper's and Sharp-shinned hawks, feed on small birds. They may be attracted to your yard simply because you have attracted lots of smaller birds. But raptors are a natural part of the ecosystem.

SEASONAL VARIATIONS

No two kinds of birds have the exact same requirements for living. Many are permanent residents, here all year. Some arrive to breed in the spring and summer, and others spend only winters in the desert. Still others come through in migration, stopping for food and shelter on their way elsewhere.

PLANTING NOTES

Too much neatness and tidiness may actually make your garden less attractive to birds. Remember, birds like lots of protective cover. Leave shrubs in natural shapes with branches low to the ground. Don't cut off spent flowers. When you do so, you are eliminating the seed source. The leaf litter that accumulates under trees and shrubs attracts insects and birds, in addition to providing a fine mulch for your plants.

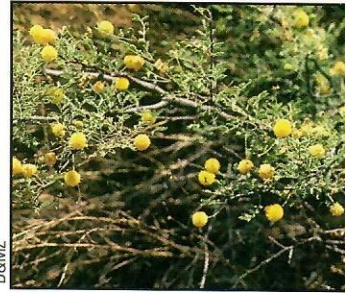
Birds tend to be most active in the early morning and late afternoon. During the middle of the day they often rest, making shelter an important component in your yard.

Intersperse rocks among your plants. Birds like to perch on them. Logs or dead wood also harbor lots of insect food. Many birds like to take dust baths. If you have areas of bare ground, with loosened soil, leave some for the birds.



Mourning Dove AM/ASDM

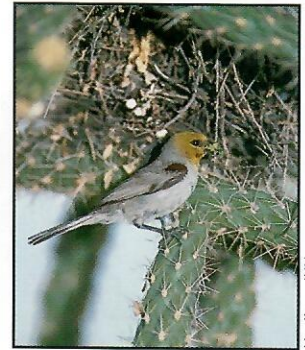
Whitethorn Acacia *Acacia constricta*



D&MZ

Whitethorn acacia is a large shrub or small tree, typically no more than 8-10 feet in height, found throughout southeastern Arizona to Texas and into Mexico. When in flower and fruit, this plant is a favorite of many birds. Small yellow balls of fragrant flowers occur May to September. Verdins,

active little birds with yellow heads, visit the flowers, gleaning insects and nectar. As the plant grows taller, it becomes more attractive as a place to nest. Verdin nests are conspicuous, bulky spheres made of thorny twigs, about the size of a large softball, with the entrance low on one side. Verdins may build several nests and use them for sleeping as well as for raising young. Sparrows, Pyrrhuloxias, and finches may all feast on the seeds produced by whitethorn. Left unpruned and low to the ground, the plant provides a protected place for birds to hide from predators.



Verdin JHH

Agave *Agave palmeri*



GS

Agaves make handsome accent plants with their rosettes of succulent leaves. However, it is when they bloom that they become most attractive to birds. Most agaves flower at 5-20 years, depending on the species and the amount of

water available. Agave palmeri, native to New Mexico, Arizona, and Sonora, has a 15-foot spike with pale yellow flowers; as with other agaves, these blooms attract insects and nectar-feeding birds.

Striking orange-and-black male Hooded Orioles make regular visits to feed on the many insects that are attracted to the agave stalk, as well as on the nectar from the flowers. The male Hooded Oriole has a jumbled, musical song. Hummingbirds will also visit the flowers to sip the nectar and catch tiny insects. Although the flowering of the agave is quite spectacular, it also signifies the end of the plant's life. Almost all agaves die after flowering, but many species produce "pups" or suckers at the base of the rosette, thus ensuring the survival of the species.



D&MZ

Desert Marigold

Baileya multiradiata



AHG

Many members of the composite plant family are prolific producers of wild birdseed. Desert marigold is a short-lived perennial that produces yellow, daisylike flowers in the spring and fall. If water is available, it will bloom in other seasons. The dried seeds are an excellent food

source for seed-eating birds like Inca Dove. These small, gray birds have a scalloped pattern on their plumage. When they fly, they flash a reddish brown color in their wings and white outer tail feathers. Their call is a soft, whistled "no hope." Inca Doves are prolific nesters and may breed nearly year round in the desert Southwest.



JHH

Baja Fairy Duster

Calliandra californica



KK

Rich with insect life and nectar, Baja fairy duster is an excellent choice for the bird garden. If winters are mild and the plant receives supplemental water, it will bloom on and off all year round. Its bright red flower clusters are very attractive to

Costa's Hummingbirds. Small even for a hummingbird, the adult male has a purple throat patch and crown. Verdins also visit the flowers to feed on the nectar.

Verdins and Cactus Wrens may collect the dried flower heads to provide a soft lining for their nests. The native fairy duster, *Calliandra eriophylla*, is low growing with light pink flowers and is also visited by hummingbirds, but not as enthusiastically. Seeds of both fairy dusters are attractive to quail, doves, and finches.



Costa's Hummingbird D&MZ

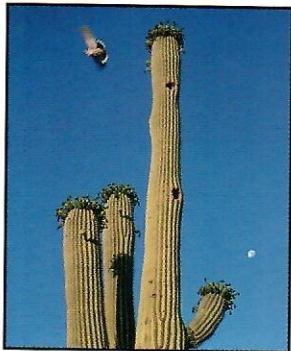


Calliandra eriophylla LHK

Saguaro

Carnegiea gigantea

DH/ASDM



This large columnar cactus is one of the most valuable wildlife plants of the Sonoran Desert. Plants more than 8 feet tall bear white, night-blooming flowers in May. These mature into red, edible fruit with tiny black seeds. Nectar and pollen, as well as fruit and seeds, attract many species of birds, such as Curve-billed Thrashers, doves, mockingbirds, and orioles.

Holes in the saguaro provide nesting sites for several kinds of birds. The mass of water in the flesh of the plant moderates temperature extremes, and the spiny trunk provides protection from predators. Gila Woodpeckers and Gilded Flickers excavate nest cavities in both the main trunk and branches. Gila Woodpecker is a noisy, conspicuous bird with brown underparts, and black and white zebra stripes on its back.



Gila Woodpecker VAL

Gilded Flicker D&MZ



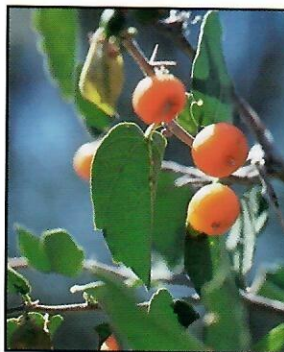
Gilded Flicker, another kind of woodpecker, has a more complicated pattern of spots and bars. When the flicker flies, you can see a flash of yellow underneath its wings. These two woodpeckers usually use the saguaro cavities for only one nesting season. Aban-

doned holes become prime real estate for a variety of other cavity nesters who do not do their own excavating. Elf Owls and Western Screech-Owls raise their broods using these holes without modification. Purple Martins and Ash-throated and Brown-crested flycatchers may take more care to make the nest comfortable, lining it with grasses, feathers, hair, and bark fragments. In more rural settings, Red-tailed and Harris's hawks use the large branches to hold their nests of twigs and sticks. These nests may be used during subsequent seasons by Great Horned Owls.

Desert Hackberry

Celtis pallida

MO

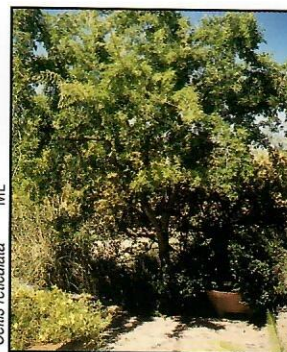


Desert hackberry is a large shrub that makes an excellent screening plant. Its spiny branches tend to sprawl, although it can be pruned as a hedge. With its dense form and evergreen leaves, hackberry provides wonderful nesting sites for birds like the Pyrrhuloxia. This desert specialty is related to the more widespread Northern Cardinal, as suggested by its bright whistled song and pointed

crest. However, the male Pyrrhuloxia is mostly gray, with accents of red, and his stubbier bill is yellow, not pink. Pyrrhuloxias and other fruit-eating birds, such as cardinals and mockingbirds, feed on the small reddish-orange fruits of the hackberry. The shaded leaf litter under the shrub invites ground-foraging birds to hunt for insect larvae. Without supplemental water, this is a slow-growing plant.

Related to desert hackberry is the netleaf hackberry, *Celtis reticulata*, a substantial tree that grows along streams and washes from 2500 to 6000 feet. This will need supplemental water in the lower desert; however, its warty bark and pendulous branches make it particularly interesting. In addition to providing shelter and cover, the plant produces orange to purple berries in late summer that birds love.

Celtis reticulata ML



Pyrrhuloxia JHH

Blue Palo Verde *Cercidium floridum*



JRE

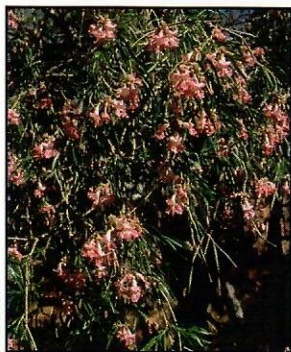
This native legume grows naturally as a multiple-trunked tree with widely spreading branches, making it an ideal tree for nesting birds. Mourning Dove, one of our most familiar birds, often builds its flimsy platform of twigs in the palo verde.

Although not particularly good architects, Mourning Doves are very successful raising young--sometimes rearing as many as 5-6 broods per year. The mournful cooing of this bird is a familiar sound in the desert Southwest. In April, the palo verde produces masses of bright yellow flowers that attract Verdins and orioles who feast on nectar and insects. The small-thorned twigs form a dense canopy and provide good nighttime roosting sites for many species of birds.



Mourning Dove JHH

Desert Willow *Chilopsis linearis*



AM/ASDM

Although this tree is not a true willow, its long, narrow leaves make it look like one. Desert willow can reach a height of 20 feet, and from April through September it bears a profusion of large white to purple nectar-producing flowers. Like other trees, it provides shelter for nesting. It may also attract birds searching for insects. Ruby-crowned Kinglet, one of our



VAL

winter avian visitors, is a small, very active bird that moves restlessly about, foraging for insects among foliage and branches. As it hops from twig to twig, it constantly flicks its wings slightly open and then shut again. This nervous twitching gives it a

hyperactive look. Males of this species have a ruby-red crown patch that is hidden most of the time. The male may erect his red crown feathers when agitated or excited by a possible rival, mate, or predator.



Chilopsis linearis detail AHG

Thistle *Cirsium neomexicanum*



MQ

This native thistle occurs from 1000 to 6500 feet and is commonly found along roadsides where extra moisture tends to accumulate. In the desert garden it will do best if given extra water. Considered a weed in many parts of the country, thistle does not reseed readily in the desert garden where watering is kept to a minimum. This is a biennial wildflower requiring two years to flower and fruit. The lavender

flowers occur from March to September. Lesser Goldfinches especially favor thistle seeds. These little birds are usually found in small groups. When feeding, they look like acrobats hanging upside

D&MZ



down as they dig deep into the seed head. The variable song of the male often includes short imitations of the voices of other birds. Thistle down is used by some birds to line their nests.

Brittle Bush

Encelia farinosa

This native shrub, with its silvery gray-green leaves and masses of yellow daisylike flowers, is one of the best seed producers around. It blooms in early spring and occasionally after the summer rains. It can



AHG

survive with little or no irrigation, but looks best if watered occasionally during the summer. Fast growing but short-lived, brittle bush reaches a height of 3 feet and a width of 4 feet or more. The abundant seeds are a favorite food of House Finches. These birds are



female VAL

streaky brown, and the males are decorated with accents of red. House finches are social birds and are usually found in small groups. Other seed-eating birds such as sparrows and quail also feast on the brittle bush seeds.



male JHH

Wild Sunflower

Helianthus annuus

The numerous flowering branches of this tall, annual, native wildflower not only add brilliant color to any garden space, they also attract birds. After the bright yellow flowers have gone to seed, the sunflower is visited by birds like Northern Cardinal. Familiar garden birds in the southeastern United States, cardinals are also locally



KK

common in the desert Southwest. The bright red male is unmistakable with his black mask and jaunty crest. Cardinals have a special affinity for sunflower seeds. The wild sunflower grows vigorously and sometimes attains a height of 8 feet.



male VAL



female VAL

Chuparosa

Justicia californica



AHG

Hummingbirds are uniquely designed to feed at slender, trumpet-shaped flowers, especially those with orange or red blossoms. They stick their long bills deep into the flower center to gather nectar and small insects. *Justicia californica*, or chuparosa, is an excellent

selection for the bird garden. Drought tolerant and semi-hardy, it bears bright red tubular flowers in spring, summer, fall, and winter if not frozen back. Rufous Hummingbird, a migrant through much of the desert Southwest, feeds avidly on chuparosa flowers. The male is a brilliant reddish brown with a flaming orange-red throat. These birds are particularly aggressive and will defend their favorite food plants, driving away other hummingbirds that approach. They are most commonly seen in the Southwest in late summer.

Two other species in the genus *Justicia* are also good hummingbird attractants. *Justicia candicans*, red justicia, and *J. spicigera*, Mexican honeysuckle, both sport lush green leaves and bright orange or red flowers. They are attractive plants for the mini-oasis or transition zones.



VAL



Justicia spicigera BG

Wolfberry

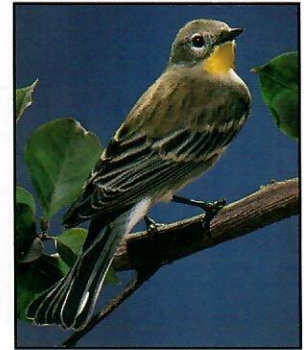
Lycium species



AM/ASDM

Shrubs of the genus *Lycium*, such as *L. berlandieri*, *exsertum*, and *fremontii*, share the common name of wolfberry. All are large and dense, and provide excellent cover. The small purple or white flowers attract hummingbirds. Thrashers and towhees like to scratch beneath these

shrubs for insects, and other birds eat the small fruits produced by the plants. Many tiny insects feed on the stems and leaves of the wolfberry, attracting birds like Yellow-rumped Warblers. These birds look a little more colorful in breeding plumage, but we rarely see them that way in the deserts of the Southwest. Here they are winter visitors only. Even in their more subtle winter plumage, they have yellow rump patches. These warblers are versatile in their feeding habits; they may search among twigs and leaves for insects, hover while taking insects from foliage, or fly out to catch flying insects. Unlike most warblers, they also eat berries.



JH

Spiny Mimosa

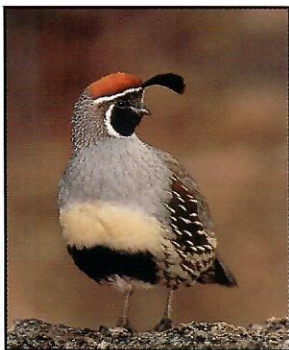
Mimosa dysocarpa

Mimosa dysocarpa, a small open shrub, is one of the showiest mimosas in southeastern Arizona, ranging from 3500-6500 feet. The long spikes of bright purplish-pink flowers occur late summer and fall. Once established,



JB/ASDM

male VAL



the plant needs almost no irrigation. At lower elevations, a little extra water will improve its appearance. Mimosa seeds are eaten by various birds, including Gambel's Quail. These handsome ground-dwelling birds are recognized by their curved, black head plumes. Family groups of Gambel's Quail, with up to a dozen downy chicks

scurrying along with the parents, are often seen in late spring and summer. They add life and color to many suburban and rural gardens in the Southwest.



female VAL

Deergrass *Muhlenbergia rigens*

JRE



Bunchgrasses like deergrass add diversity to the landscape and are handsome as accent plants. They attract birds in several ways by providing seed, cover, and nesting materials. Found in most of Arizona from 3000 to 7500 feet, deergrass normally grows 3-5 feet high and blooms from July to October. This grass performs best with regular irrigation, so it is a good choice for the mini-oasis.

Its seeds are popular with birds like White-crowned Sparrows. Smartly patterned with black and white head stripes, these sparrows are winter visitors in the Southwest. They are usually seen in small groups,

foraging on the ground or low in shrubs for seeds. The large clumps of grass also make natural hiding places. Quail may nest under the clumps, and the coarse leaves are used by many birds for nesting material. Other species of *Muhlenbergias* also provide food and cover.

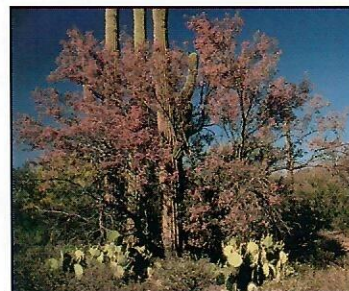


White-crowned Sparrow VAL

Desert Ironwood *Olneya tesota*

This slow-growing Sonoran Desert native tree is normally found at elevations below 2500 feet and may need frost protection in cooler locations. The ironwood has gray-green leaves and gray bark, and produces lavender flowers in late spring. Its dense, thorny branches make it an

excellent nesting tree for a variety of birds, including the Cactus Wren. The state bird of Arizona, the Cactus Wren is big and bold with lots of spotting and streaking and a broad white eyeline. It moves with jerky motions and has a harsh, rasping voice. Cactus Wrens make large, bulky, football-shaped nests and use these for sleeping as well as for raising young.



MAD/ASDM

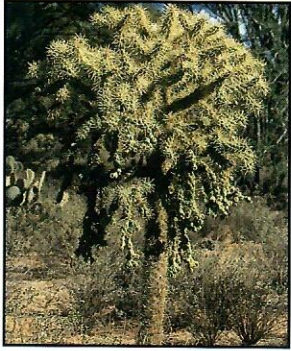
VAL



Cholla

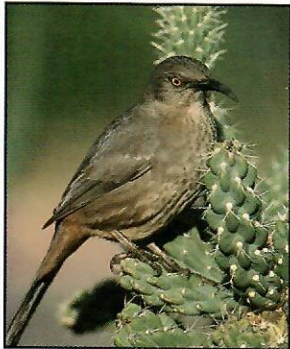
Opuntia species

Opuntia fulgida AHG



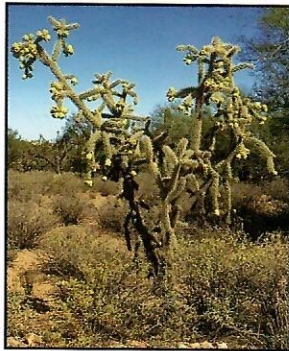
Tall, thickly branched cholla cacti such as chain fruit, *Opuntia fulgida*, or cane cholla, *O. spinosior*, are preferred nesting sites for many birds. A bird that usually chooses cholla for its nest is the Curve-billed Thrasher. It builds a nest of sticks and twigs, and the female lays 2-4 pale blue eggs. Nests are protected from predators by barbed spines covering the cholla

branches. Almost uniformly brown, the Curve-billed Thrasher has yellow-orange eyes and a large down-curved bill, which it uses for digging in desert soils as it searches for insects and grubs. The bird may also be recognized by its loud, double-noted whistle. Many gardeners prefer to plant these cacti in a back corner because of their wicked spines and habit of some species to drop joints. Fruits of the chollas are generally dry and unattractive to wildlife.



JHH

Opuntia spinosior GJ



Penstemon

Penstemon species

Penstemon parryi MQ



Plant several species of penstemon for best results. *P. parryi*, with light pink trumpets, and the red-flowering *P. eatoni* provide early color. They are followed by *P. pseudo-spectabilis* with stalks of deep pink flowers. *P. barbatus*, *P. superbus*, and *P. cardinalis* all have



Black-chinned Hummingbird JHH

Penstemon eatoni MQ



flowers in varying shades of red and extend the blooming season. *P. baccharifolius* bears red flowers in late summer and fall, later than most penstemons.

Black-chinned Hummingbirds will enjoy this food source throughout the warm season. Aptly named, the male of this species does have a black chin, but beneath this is a band of iridescent purple. The female has a plain throat and white spots on the tail. Black-chins are spring and summer residents only and head south to Mexico for the winter. The flowers of penstemon are also popular with House Finches, which may pluck off the flowers just as they begin to open.

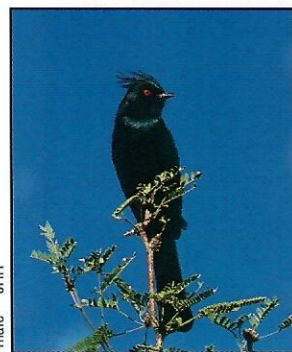
Desert Mistletoe *Phoradendron californicum*



Desert mistletoe roots on the trunks and branches of a number of desert trees and shrubs, primarily those in the legume family. It is a parasite that saps the host tree of water and nutrients. Desert mistletoe has jointed stems, grows in clumps, and produces lots of red berries that attract birds. One bird that feasts on the berries is the Phainopepla, a slim, crested bird with red eyes. Males are glossy

black, females are gray. The seeds of the mistletoe pass unharmed through the Phainopepla's digestive tract and are often deposited on branches where new plants may sprout. Very heavy infestations of mistletoe can kill a tree or shrub, but it is probably not harmful in small quantities and can be controlled by removing it manually.

Other fruit-eating birds such as mockingbirds and thrashers also eat the berries. Dense tangles of mistletoe are used by quail and other birds as nighttime roosting spots. Many kinds of birds build nests atop a clump. Although this plant is a parasite, it is native and natural and plays an important part in the desert ecosystem. You cannot purchase mistletoe at your local nursery, but perhaps the birds will bring it to your garden.

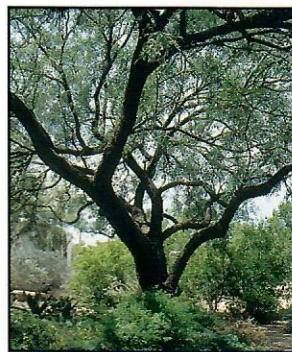


female R&NB

male JHH

Velvet Mesquite *Prosopis velutina*

Velvet mesquite is native to southeastern Arizona and grows fast to about 30 feet tall and wide. The branching habits of this tree make it attractive as a nesting site. White-winged Doves, mainly summer residents in the Southwest, often choose it for building their nests. Usually constructed on a horizontal limb or fork in a branch, their nests are flimsy platforms made of sticks. White-wings are rather large and bulky doves with white wing patches;



their red eyes are surrounded by patches of blue skin.

Mesquite flowers attract many insects. The dry pods of the tree contain seeds that are attractive to other doves, quail, sparrows, and finches.



JHH

Pyracantha, Firethorn *Pyracantha* species



KK

This non-native, evergreen plant can be used in several landscaping situations. Several species and varieties are available ranging from prostrate and low growing to large sprawling shrubs. Pyracantha is hardy, moderately drought tolerant, and can be grown in full sun to partial shade.

Dense and thorny, it provides protective cover and nesting sites for a variety of birds. One of its best selling points, however, is the profusion of bright red-orange berries that appear in fall and winter.

These berries are among the favorite foods of Northern Mockingbird, a slim gray bird with white wing patches. A member of the Mimidae family (sometimes called Mimic thrushes), the mockingbird is an

excellent songster, often tossing imitations of other birds into its repertoire. It can frequently be heard singing in the middle of the night. Other fruit-eating birds—such as cardinals, finches, thrashers, and sparrows—will also eat pyracantha berries. In some winters, the berries attract robins and waxwings.

RL/ASDM



Red Sage, Autumn Sage *Salvia greggii*

Red sage is a small evergreen shrub that grows to 3 feet tall and wide. Showy spikes of flowers appear from March to November. Flowers come in a variety of colors, but those with reddish hues are particularly attractive to hummingbirds.

Anna's Hummingbird is a common winter visitor to

much of the desert and sometimes stays all year long. The male has a ruby red throat and head. These iridescent colors appear dark unless the light is shining on them in just the right way. More vocal than most hummingbirds, the male Anna's has a buzzy, repetitive song, often delivered while perched. The female, lacking red accents, is rather plain. (Female hummingbirds are notoriously difficult to identify.) Native to the Chihuahuan desert region, *Salvia greggii* is hardy and moderately drought tolerant. You may need to prune to keep this plant dense and less woody.



VAL

Graythorn *Zizyphus obtusifolia*



AS

Another large spiny shrub, graythorn has purple fruits attractive to birds. Its thorny, interwoven branches provide concealed nesting sites for birds like Abert's Towhee. Warm brown with a black mask, Abert's Towhee is most numerous in areas with dense cover,

such as streamsides or well-vegetated gardens. It often feeds on the ground, scratching with both feet among the leaf litter for insects and larvae. If disturbed, it scoots into dense shrubbery, making sharp ping-pong callnotes.



D&M

OTHER PLANTS TO CONSIDER

Four-wing Saltbush *Atriplex canescens*



LHK

Four-wing saltbush is an erect, dense, silver-gray shrub that reaches 8 feet in height with a similar spread. It is excellent for screening or background use, and requires no special care once established. Best left unpruned, saltbush provides excellent cover for birds. It also produces

a profusion of seeds that attract quail, doves, finches, and towhees.

Black Dalea

Dalea frutescens

This low spreading evergreen is native to the Chihuahuan Desert. Rose purple flowers appear in late summer and fall and are a favorite food of Gambel's Quail. The birds pick off the flower heads that are within reach. Other daleas are also worth trying.

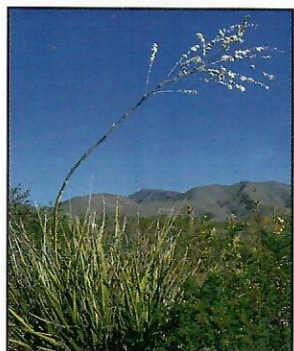


LHK

Giant Hesperaloe

Hesperaloe funifera

This Chihuahuan native seems to be an unlikely bird attractor at first glance, but once it flowers, the 14 foot tall flower spike becomes a magnet for many kinds of birds. The branches bear numerous white flowers that attract insects and thus the birds that feed on them. The long flower spike remains on the plant for many months after flowering, and makes a useful perch for birds. Mockingbirds may use the branches for mating dances. Clumsy young thrashers may cling tight to the stem, learning to balance high above the ground. Cactus Wrens may sway on the flower spike, using it as a perch to call forth with their loud raucous voices. A related species, *H. parviflora*, has bright red tubular flowers that attract hummingbirds.



RGE/TBG

Prickly Pear

Opuntia species

Some of the larger prickly pear cacti like *Opuntia phaeacantha* and *O. ficus-indica* have pulpy red fruits, 2 to 3 inches long, that are attractive to both wildlife and people. The ripe fleshy fruits are filled with seeds and are feasted upon by many birds, such as doves, thrashers, finches, and woodpeckers, and by many small mammals.



KK
Opuntia phaeacantha

Pomegranate

Punica granatum

Pomegranate is a large shrub or small tree native to southwestern Asia. It thrives in hot, dry desert valleys, though an occasional deep soaking will improve its appearance and promote good flowering and fruit set.

When it is in flower, hummingbirds are frequent visitors. When the fruits split open, they attract both insects and birds. Mockingbirds, Pyrrhuloxias, Gila Woodpeckers, Cactus Wrens, finches, and thrashers all feed on the fleshy red seeds.



AHG

Hummingbird Trumpet

Zauschneria californica

This is a low shrub or ground cover, spreading by underground runners. The reddish orange tubular flowers appear in late summer and fall, providing an excellent food source for hummingbirds and Verdins. *Zauschneria* may freeze back in winter but comes up vigorously in spring. In the wild it grows in damp places in canyons from 2500-7500 feet, and performs better in the garden with supplemental water.



AHG

Desert Zinnia

Zinnia acerosa

Desert zinnia is a low-growing perennial that produces white flowers primarily in the spring and fall. The flower petals persist on the plant, become quite papery and are relished by quail, finches, and sparrows.



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COMPARATIVE PLANT TABLE

Name	Attractive to birds for:			
	Nectar	Fruit	Seeds	Insects
Acacia constricta	X		X	X
Agave palmeri	X			X
Atriplex canescens			X	X
Baileya multiradiata			X	X
Calliandra californica	X		X	X
Calliandra eriophylla	X		X	X
Carnegiea gigantea	X	X	X	X
Celtis pallida		X		X
Celtis reticulata		X		X
Cercidium floridum	X		X	X
Chilopsis linearis	X			X
Cirsium neomexicanum	X		X	X
Dalea frutescens			X	X
Encelia farinosa			X	X
Helianthus annuus			X	X
Hesperaloe funifera				X
Hesperaloe parviflora	X			X
Justicia californica	X			X
Justicia candidans	X			X
Justicia spicigera	X			X
Lycium berlandieri	X	X		X
Lycium exsertum	X	X		X
Lycium fremontii	X	X		X
Mimosa dysocarpa			X	X
Muhlenbergia rigens			X	X
Olneya tesota			X	X
Opuntia ficus-indica		X	X	X
Opuntia fulgida				X
Opuntia phaeacantha		X	X	X
Opuntia spinosior				X
Penstemon baccharifolius	X		X	X
Penstemon barbatus	X		X	X
Penstemon cardinalis	X		X	X
Penstemon eatoni	X		X	X
Penstemon parryi	X		X	X
Penstemon pseudospectabilis	X		X	X
Penstemon superbus	X		X	X
Phoradendron californicum		X		X
Prosopis velutina	X		X	X
Punica granatum	X	X	X	X
Pyracantha species		X		X
Salvia greggii	X			X
Zauschneria californica	X			X
Zinnia acerosa			X	X
Zizyphus obtusifolia		X		X

¹ Shelter includes nesting and roosting sites, and sources of nesting material

COMPARATIVE PLANT TABLE

Shelter ¹	Flower season	Water use	ANPS Booklet	Page
X	Spr, Sum	Low	DT	7
	Sum	Low	DAP	7
X	Spr-Sum	Low	---	25
	Spr, Fall	Low	DW	8
	All	Low	DS, DBG	9
	W-Spr	Low	DS	9
X	Spr	Low	DAP	10
X	Spr	Low	DBG	11
X	Spr	Mod	---	11
X	Spr	Low	DT	12
X	Spr-Sum	Low	DT	12
	Spr-Fall	Mod	DW	13
	Sum-Fall	Low	DS, DBG	26
	Spr	Low	DS	14
	Sum-Fall	Low-Mod	DW	15
	Sum-Fall	Low	DAP	26
	Sum-Fall	Low	DAP	26
	Spr-Fall	Mod	DS	16
	All	Mod	DS	16
	All	Mod	DS	16
X	Spr-Sum	Low	---	17
X	W-Spr	Low	---	17
X	Spr, Fall	Low	---	17
	Sum-Fall	Low-Mod	---	17
X	Sum-Fall	Mod	DG	18
X	Spr	Low	DT	19
X	Spr	Low	DAP	26
X	Sum	Low	DAP	20
	Spr	Low	DAP	26
X	Spr	Low	DAP	20
	Sum-Fall	Low	---	21
	Spr	Low-Mod	DW	21
	Spr	Low-Mod	---	21
	Spr	Low-Mod	DW	21
	Spr	Low	DW	21
	Spr	Low	DW	21
	Spr	Low	DW	21
X	Fall	Low	---	22
X	Spr-Sum	Low	DT	23
X	Spr	Low	---	27
X	Spr	Mod	---	23
	Spr-Fall	Mod	DS	24
	Fall	Mod	---	27
	Spr-Fall	Low	DW	27
X	Sum	Low	---	25

² ANPS Booklets: DT, Desert Trees, 1990; DS, Desert Shrubs, 1990; DW, Desert Wildflowers, 1991; DAP, Desert Accent Plants, 1992; DG, Desert Grasses, 1993; DBG, Desert Butterfly Gardening, 1996.

COMPARATIVE BIRD TABLE

Common Name	Scientific Name	Seasonal Status*	Page	Check list**
Gambel's Quail	<i>Callipepla gambelii</i>	P	18	
White-winged Dove	<i>Zenaida asiatica</i>	S	23	
Mourning Dove	<i>Zenaida macroura</i>	P	12	
Inca Dove	<i>Columbina inca</i>	P	8	
Black-chinned Hummingbird	<i>Archilochus alexandri</i>	S	21	
Anna's Hummingbird	<i>Calypte anna</i>	P	24	
Costa's Hummingbird	<i>Calypte costae</i>	P	9	
Rufous Hummingbird	<i>Selasphorus rufus</i>	M	16	
Gila Woodpecker	<i>Melanerpes uropygialis</i>	P	10	
Gilded Flicker	<i>Colaptes chrysoides</i>	P	10	
Verdin	<i>Auriparus flaviceps</i>	P	7	
Cactus Wren	<i>Campylorhynchus brunneicapillus</i>	P	19	
Ruby-crowned Kinglet	<i>Regulus calendula</i>	W	13	
Northern Mockingbird	<i>Mimus polyglottos</i>	P	24	
Curve-billed Thrasher	<i>Toxostoma curvirostre</i>	P	20	
Phainopepla	<i>Phainopepla nitens</i>	W	22	
Yellow-rumped Warbler	<i>Dendroica coronata</i>	W	17	
Northern Cardinal	<i>Cardinalis cardinalis</i>	P	15	
Pyrrhuloxia	<i>Cardinalis sinuatus</i>	P	11	
Abert's Towhee	<i>Pipilo aberti</i>	P	25	
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	W	18	
Hooded Oriole	<i>Icterus cucullatus</i>	S	8	
House Finch	<i>Carpodacus mexicanus</i>	P	14	
Lesser Goldfinch	<i>Carduelis psaltria</i>	P	13	

*Seasonal status: P = present all year; M = migrant, passing through in spring and fall; S = summer resident; W = winter resident.

**This column is provided for you to check off the birds as you see them. Some people like to enter the date of their first sighting.

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- To broaden knowledge and appreciation of plants native to Arizona and their habitats;
- To work to protect those native plants and their habitats;
- To encourage landscaping with native plants and other plants appropriate to Arizona.

For information on other desert plant booklets in this series (trees, shrubs, vines and ground covers, wildflowers, accent plants, grasses, and butterfly gardening) or membership in ANPS, contact:

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Cover design by Rachel Taylor © 1997

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