

Magpies

Magpies and jays are in the Corvid family, which includes ravens and crows. These social birds are bold and gregarious, and adapt well to living around humans. Many feel that corvids rank among the most intelligent of birds. The black-billed magpie (*Pica pica*, Fig. 1) is easily distinguished from other birds by its striking black-and-white color pattern. It has an unusually long tail (at least half its body length) and short, rounded wings that show flashes of white in flight. The feathers of the tail and wings are iridescent, reflecting a bronzy-green to purple. The juvenile magpie is similar to the adult, but has less iridescence and a shorter tail.

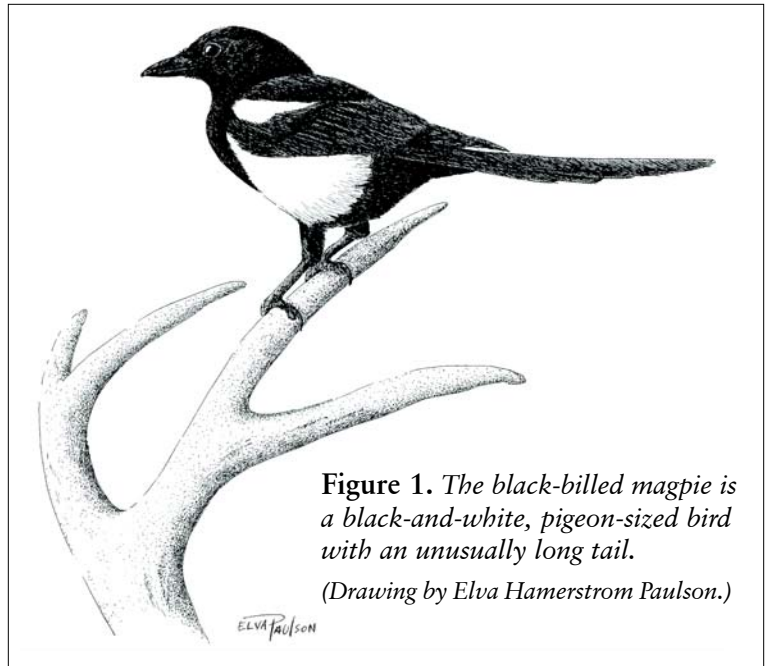


Figure 1. *The black-billed magpie is a black-and-white, pigeon-sized bird with an unusually long tail.*

(Drawing by Elva Hamerstrom Paulson.)

Magpies are typically found close to water in open areas near scattered trees and thickets east of the Cascade Mountains.

Since the mid 1900s, when they were regularly trapped or shot, magpies have increased in abundance. They are now common birds of rural, suburban, and even city parks and gardens.

Facts about Magpies

Food and Feeding Behavior

- Black-billed magpies are resourceful opportunists. They flip items over to look for food, follow predators with hopes of scavenging scraps, pick insects from the backs of cattle and sheep, and steal food from other birds.
- Magpie diets include mostly animal matter: insects, small mammals, small wild birds and their hatchlings and eggs. They also eat seeds, fruits, and nuts.
- Magpies often congregate on recently killed large animal carcasses and eat many road-killed small mammals and birds. They can use scent to find food—an unusual trait for birds, which generally have very little sense of smell.
- Food may be stored in trees, shrubs, and in shallow pits magpies dig in the ground.

Reproduction and Family Structure

- Adult magpie pairs stay together year-round and for life unless one dies, in which case the remaining magpie finds another mate.
- The breeding season for magpies is from late March to early July.
- The female incubates six or seven eggs for 16 to 18 days. The male feeds the female throughout incubation.
- Young fly three to four weeks after hatching, feed with adults for about two months, and then fly off to join other juvenile magpies.
- Magpies form loose flocks throughout the year; winter congregations may include several hundred individuals.

Nest and Roost Sites

- Black-billed magpies nest once a year, but will re-nest if their first attempt fails.
- Magpies nest individually or in loose colonies, frequently toward the top of deciduous or evergreen trees or tall shrubs.

- Nests are built by both sexes over a 40- to 50-day period. Old nests are repaired and used, or a new nest is built on top, with older nests reaching 48 inches deep by 40 inches wide.
- Nests are loose accumulations of branches, twigs, mud, grass, rootlets, bark strips, vines, needles, and other materials, with branches and twigs constituting the base and framework. The nest cup is lined with fine rootlets, grass, and other soft material.
- Nests almost always contain a hood or dome of loosely assembled twigs and branches, and usually have one or more side entrances.
- Other bird species, including small hawks and owls, often use old magpie nests.

Mortality and Longevity

- During the first half of the 20th century, black-billed magpies were considered detrimental to game-bird populations and domestic stock, and were systematically trapped or shot. Many also died from eating poison set out for coyotes and other predators.
- In 1933, 1,033 magpies were shot in Washington's Okanogan valley by two teams of bounty hunters.
- Today, adult magpies have few predators, although large hawks occasionally take some. Nestlings die from starvation, adverse weather, and attacks by raccoons, owls, and other animals.
- Pesticides used on livestock are of some concern, since magpies perch on livestock and eat those pests that are being poisoned.
- The life span of a magpie in the wild is four to six years.

Viewing Magpies

The magpie is probably the most conspicuous bird seen throughout interior areas of the Pacific Northwest (Fig. 2). Where they are not harassed, magpies can be extremely bold; when harassed, they become elusive and secretive.

During the breeding season, magpies are often seen in areas that combine woods or thickets for nesting, water for drinking and bathing, and open areas for feeding.

During the nonbreeding season, particularly winter, magpies are most numerous in environments influenced by people, such as livestock feedlots, barnyards, roadsides, garbage dumps, railway loading yards, and grain elevators. Individual magpies may wander widely.

Magpie migration is mainly elevational, from low to high, although some north-south movements occur. Where winters are severe, all magpies leave the high country.

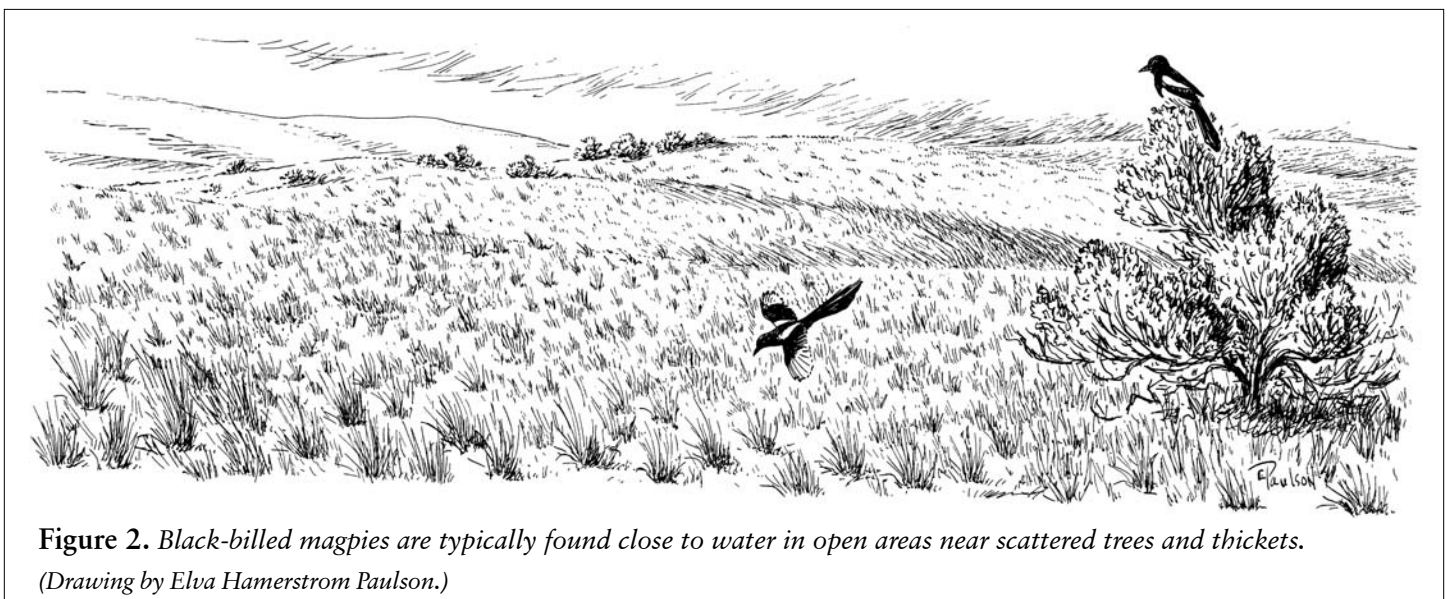


Figure 2. *Black-billed magpies are typically found close to water in open areas near scattered trees and thickets.*
(Drawing by Elva Hamerstrom Paulson.)

Magpies are not swift fliers and elude predators and danger by flitting in and out of areas with trees or diving into heavy cover.

If you locate a colony of magpies, find a spot where you can view an expanse of trees and meadow with binoculars. Sit down and wait. It won't be long before the magpies will ignore you and go about their daily activities. If you notice that your presence is annoying the birds, you are too close. Back away, sit down quietly, and wait for them to return to the area.

Nest Sites

Magpies build huge, domed nests. In the winter when deciduous trees are bare, the large nests are easily seen. Because of their size, you may first think they are hawk nests, but look for the telltale dome, an adaptation that protects the young from predators.

Roost Sites

From midsummer through fall and winter, magpies gather together in the evening and form communal roosts. Roosts are located in dense thickets of shrubs and trees near major food sources. The birds use deciduous thickets until the arrival of colder temperatures, at which time they move into conifers. Sometimes old magpie nests are used as night roosts.

The portions of food magpies can't digest are bundled into compact "pellets" and later regurgitated. Pellets are usually found under or near the roost.

Tracks and Trails

A magpie's tracks show four medium-wide toes, three facing forward and one back. The claws are long and their marks are detached from the footprint.

Like virtually all other corvids, magpies walk with a strut, and hop quickly when rushed. The walking stride is about 6 inches and a tail print may be visible.

Calls

Typical calls include a rapid, nasal *mag? mag? mag?* or *yak yak yak*.

Preventing Conflicts

Magpies help control pest insects such as grasshoppers and tent caterpillars, and also "clean up" dead animals and garbage scattered by other animals. Other species of birds and mammals often use unoccupied magpie nests.

Although magpies prey on songbirds and their young, research suggests that they do not ordinarily have a significant impact on songbird populations. However, because magpies are intelligent, opportunistic, and at times congregate in large numbers in close proximity to humans, conflicts can occur.

Perhaps the magpie behavior that is most annoying to farmers and ranchers is the picking of wound sites on the backs of healthy horses and livestock under certain conditions. However, this is not a common occurrence, except possibly during severe winters when food for magpies is scarce.

The following are suggestions on how to prevent and remedy problems that might arise. In cases where these methods are not practical, contact your local wildlife office.

Eating Fruits and Vegetables

Protect fruit crops with flexible bird netting, which can be purchased in a variety of lengths and widths at garden and hardware stores; professional quality materials and hardware are available from bird-control companies and over the Internet.

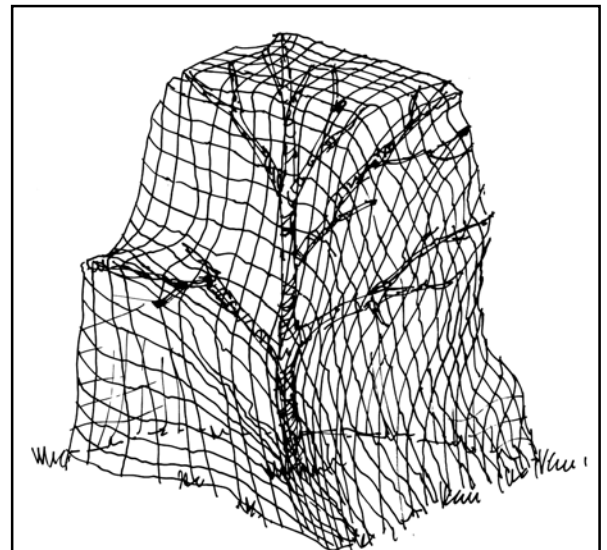


Figure 3. Protect fruit crops with flexible bird netting. Secure the netting at the base of the shrub or tree to prevent birds from gaining access from below.

(Drawing by Jenifer Rees.)

Secure the base of the shrub or the tree to prevent magpies from gaining access from below (Fig. 3). Individual small branches containing fruit can be protected with an onion sack or similar mesh covering.

Row crops, such as strawberries, can be completely covered during the fruiting season. If the netting is to be used for several harvest seasons, it may be worth the extra effort to construct a frame to support the netting.

Scare devices, such as pie tins and commercially available Mylar balloons or Mylar scare tape, are known to provide temporary protection. Suspend balloons at least 3 feet above trees or bushes, or from lines between posts. Use tethers at least 3 feet long.

Attach red and silver “bird-scare tape” to stakes and stretch it 18 inches above the areas that need protection. Twist the tape several times before attaching it to stakes so that the visible interval of red/silver is 16 inches. The tape should move freely, so that when a slight breeze blows it will flash in the sun. The space between tapes will have to be no more than 5 feet to be effective.

Because most birds will fly into a strawberry patch, land on the ground between the plants and eat the ripe strawberries from there, scare devices placed above the patch are not effective. Instead, place the scare tape between the rows. The tape should sag slightly but should not be less than 3 inches or more than 5 inches from the ground.

Scare devices need to be moved weekly (daily if possible) so magpies don’t become accustomed to them; they are also most successful if put in place before the birds become a problem. Always harvest ripe fruit immediately.

Protect germinating corn plants and other crops with bird netting until plants are about 8 inches tall. Large plastic trash bags attached to 6 to 7 foot wooden stakes, along with the above-mentioned scare tactics, can be used in areas with lots of air movement (Fig. 4). Cracker shells and propane cannons may be needed in larger plantings. Ultrasonic devices are not effective at frightening magpies.

Lawn Damage

Because new lawns are well irrigated during the growing season, worms and grubs collect under the sod, attracting magpies—and skunks and raccoons. If small sections are being damaged, lay chicken wire over the area and secure it with stakes, stones, or by some other means. Another technique is to utilize the scare tactics described above.

Small Farm-animal Damage

Freeroaming chickens, ducks, and pigeons and their eggs and young are susceptible to magpie predation.

Housing domestic birds in a durable, **completely** covered coop will exclude not only magpies but also hawks and owls. The structure can be constructed by attaching 1-inch chicken wire or bird netting to a solid framework.

Where a complete and permanent enclosure isn’t practical or desirable, escape cover should be provided. Birds have natural defenses at the sight of a predator and will quickly squeeze under a nearby building, old car, shrub, or other area. Escape cover can be made of planks, plywood, or chicken wire placed over logs, rocks, or bricks. It should be at least 7 x 7 feet wide and long and the cover should be 12 inches off the ground.

Please understand that you cannot expect to fully protect free-range birds from magpies and an occasional loss of a bird is to be expected.

Magpies at Feeders

Magpies are attracted to suet feeders and their aggressive habits can deplete food supplies and keep smaller birds from approaching. Because magpies have trouble clinging upside down, a suet feeder that requires the birds to clasp the feeder in this position will discourage magpies. Your local bird specialty store can also give you information on feeder designs to deter these birds.

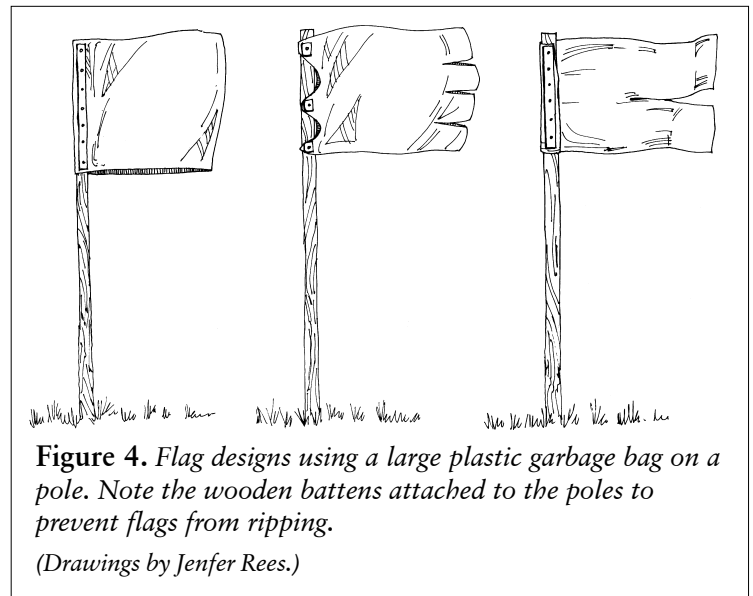


Figure 4. Flag designs using a large plastic garbage bag on a pole. Note the wooden battens attached to the poles to prevent flags from ripping.

(Drawings by Jenfer Rees.)

Communal Night Roosts

The communal night roosts of magpies create accumulations of droppings with the potential to spread disease. When and where this poses a health risk to the public (as deemed so by a Public Health representative) or cannot be tolerated, steps need to be taken to remedy the problem. Options include making the area temporarily off limits, routinely cleaning up the soiled area underneath the roost, or dispersing the flock by making the roost site undesirable to magpies. Large-scale intervention strategies should be undertaken with the guidance of the Department of Agriculture.

Methods to disperse magpies from a night roost include:

Harassment Techniques

Harassment techniques include visual and audio stimuli and an assortment of other approaches to make magpies uncomfortable enough to move elsewhere. If possible, act quickly when large numbers of roosting magpies are detected. The birds will be more willing to abandon a roost site they have not been using long. **Note:** Most harassment techniques are effective only for a short time and the public may not like them because they cause magpies to move elsewhere—such as a neighborhood park or someone’s backyard containing large trees.

Visual scare devices include Mylar tape, eye-spot balloons, scarecrows, and laser devices. Visual harassment devices can provide effective short-term control, especially when they are used in combination with auditory devices.

Audio scare devices include hazing with pyrotechnics such as cracker shells, blanks, and propane cannons.

When using any auditory scare device, change the area from which it is emitted, daily if possible. When using pyrotechnics, try to elevate them above the roost site.

Magpies scare most easily when they are flying. They are most difficult to scare when perched in the protection of their roost. Therefore, audio devices should begin to be used when the first birds come in to roost, usually an hour and a half before dark. The same group of magpies may circle around and come toward the roost many times, so scaring efforts need to continue until it gets dark.

Scaring should stop with darkness or the magpies will become accustomed to the sounds. If using recorded alarm calls, play them only 10 to 15 seconds per minute when the birds are coming in. When most of the birds are perched, play the call continuously until dark. If possible, early morning scaring should be used in conjunction with evening scaring, and should begin as soon as the first bird movement is detected in the roost, often just before daylight.

Success may not be achieved for several nights and will entail continuous efforts every evening and every morning. Because the magpies may attempt to establish temporary roosts in other unsuitable locations, scaring efforts may be needed elsewhere until the birds move to an acceptable area. If magpies are disturbed in their new roost site they will move back to the old one. Be prepared to resume efforts if they return.

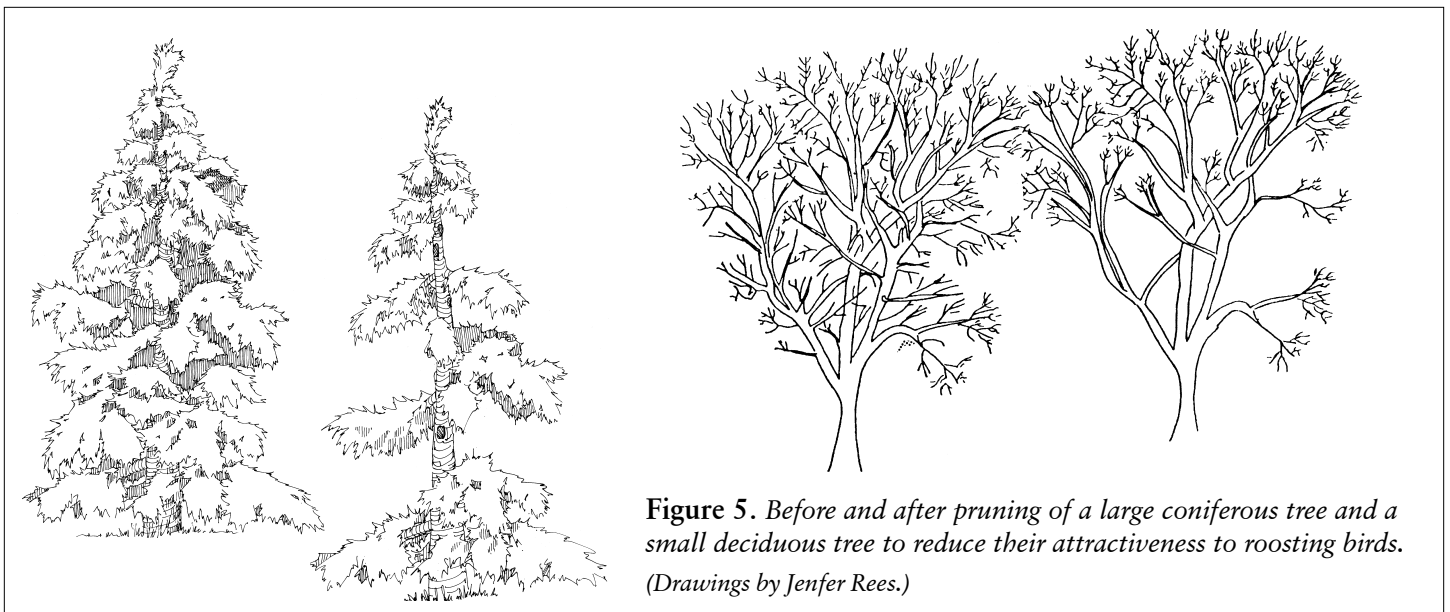


Figure 5. *Before and after pruning of a large coniferous tree and a small deciduous tree to reduce their attractiveness to roosting birds.*
(Drawings by Jenfer Rees.)

Modify the Night Roost

Modifying the structure of the magpies' night roost can discourage the birds from using it. This includes thinning up to 50 percent of the branches of roost trees, or removing trees from dense groves to reduce the availability of perch sites and to open the trees to the weather. A tree service company can remove tree limbs (Fig. 5).

Other Techniques

Other techniques to disperse magpies include using 4-inch mesh bird netting to create a barrier between the roost and the magpies; spraying magpies with water from a high-pressure hose (some cities have used a fire hose); installing a 360-degree sprinkler up in the roost tree; and lighting up the interior of the roost with bright fluorescent lights.

Lethal Control

For information regarding shooting magpies, see "Legal Status".

Public Health Concerns

Magpies and jays are not a significant source of any infectious disease that can be transmitted to humans or domestic animals. Contact the Washington Department of Health for precautions to be taken when working around large concentrations of magpie droppings.

Legal Status

Magpies are protected under the Federal Migratory Birds Treaty Act (16 U.S.C. 703–712). However, under the Code of Federal Regulations, "a Federal permit shall not be required to control . . . magpies, when found committing or about to commit depredations upon ornamental or shade trees, agricultural crops, livestock, or wildlife, or when concentrated in such numbers as to constitute a health hazard or other nuisance . . ."

Additional Information

Books

Ehrlich, Paul R., et al. *The Birder's Handbook: A Field Guide to the Natural History of North American Birds*. New York: Simon & Schuster, 1988.

Nehls, Harry B. *Familiar Birds of the Northwest: Covering Birds Commonly found in Oregon, Washington, Idaho, Northern California, and Western Canada*. Portland, OR: Audubon Society of Portland, 1989.

Peterson, Roger Tory. *A Field Guide to Western Birds*. Boston: Houghton Mifflin, 1990. Washington, DC: National Geographic Society, 2002.

Udvardy, Miklos D. F. *Audubon Society Field Guide to North American Birds—Western Region*. New York: Alfred A. Knopf, 1977.

Internet Resources

Prevention and Control of Wildlife Damage: <http://wildlifedamage.unl.edu/handbook/handbook>

Seattle Audubon's Birds of Washington State: www.birdweb.org/birdweb/

Wildlife Control Supplies: www.wildlifecontrolsupplies.com/

Adapted from “Living with Wildlife in the Pacific Northwest” (see <http://wdfw.wa.gov/wlm/living.htm>)

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