

BULLFINCH

CARD 55

GROUP 2: BIRDS

ORDER
Passeriformes

FAMILY
Fringillidae

GENUS & SPECIES
Pyrrhula pyrrhula



The bullfinch was once found only in undisturbed woodlands, but today it is increasingly common in developed areas. Its markings and build make it easily recognizable.

KEY FACTS



SIZES

Length: 6 in.
Wingspan: 10 in.
Weight: 3/4 oz.



BREEDING

Sexual maturity: 1 year.
Breeding season: April to August.
No. of broods: Usually 2; occasionally 3.
Eggs: 4-5, pale blue, flecked with purple.
Incubation: 12-14 days.



LIFESTYLE

Habit: Shy, arboreal (tree-living), woodland bird.
Diet: Seeds and fruit buds.
Lifespan: 2-4 years.



RELATED SPECIES

Several subspecies, including *Pyrrhula pyrrhula murina*, found in the Azores. Other subspecies are smaller and less brightly colored than European species.



Range of the bullfinch.

DISTRIBUTION

Widespread throughout Europe and Asia. Northern populations migrate south in winter.

CONSERVATION

Despite the loss of its habitat, the bullfinch is successfully relocating to other habitats, and numbers are increasing in some areas.

FEATURES OF THE BULLFINCH

The bullfinch is a shy bird. But when it does appear, its markings make it easy to recognize.

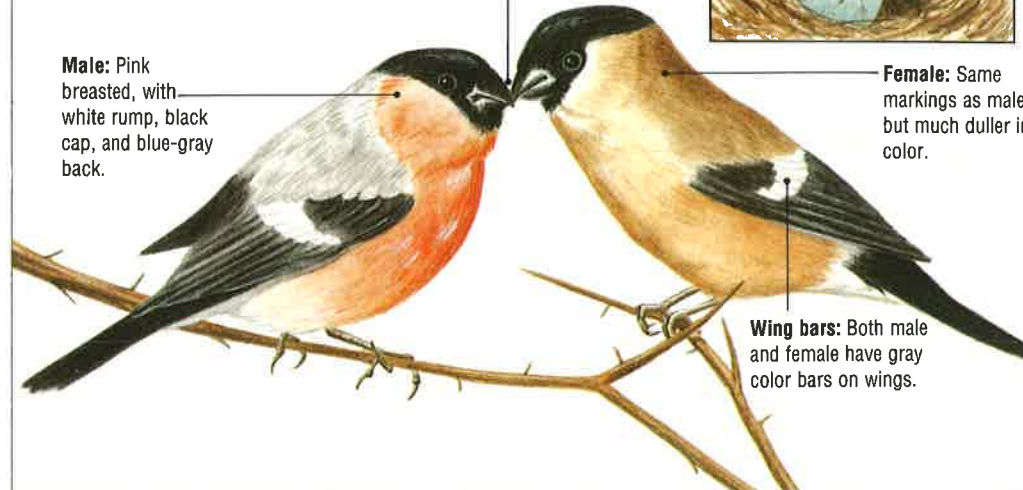
Bill: Short and rounded. Sharp cutting edge for stripping seeds and buds.

Eggs: Pale blue, flecked with purple. Female builds nest of roots in brambles or hawthorn thicket.



Male: Pink breasted, with white rump, black cap, and blue-gray back.

Female: Same markings as male, but much duller in color.



Wing bars: Both male and female have gray color bars on wings.



The bullfinch often raids gardens and cultivated fruit orchards when its natural food supply becomes scarce. This behavior makes the bird quite unpopular with fruit growers and gardeners.

FOOD & FEEDING

The bullfinch feeds mainly on seeds and buds. It uses its short, rounded, and sharp-edged beak to pick off and peel ripening fruit buds.

The bullfinch varies its diet throughout the year as different foods become seasonally available. In spring the bullfinch feeds on oak catkins, dandelions, and buttercups. During the summer it eats nettles, dock, privet, and

Left: The male bullfinch's song sounds like a creaking gate.

bramble. In the beginning of winter the bird consumes birch and ash seeds, and near the end of winter, it eats the ripening buds of hawthorn and blackthorn.

Still, in years when natural food supplies fail, the bullfinch feeds on cultivated fruit and flower buds.

The adult bullfinch is *herbivorous* (plant eating), but when it is feeding its offspring, it catches spiders and other insects, which are more nutritious for the young.



Left: The plant-eating bullfinch feeds on seeds and buds. This pink-breasted male is eating dock seeds.



THE BULLFINCH

The bullfinch has become a more common sight in developed areas because of the steady loss of its natural woodland habitat.

The male's distinctive pink

breast and shiny black head contrast with the female's more muted colors. The bird's rounded, parrotlike bill is well adapted for eating fruits and seeds.

BULLFINCH & MAN

In just a few days several bullfinches can cause great damage to a commercial orchard. But studies have shown that the bullfinch does not raid orchards when there is enough food available in

the wild. Also, orchards can be protected by simply planting areas of grass around them, which the birds are reluctant to cross.

In some areas farmers still trap and shoot the birds.

HABITAT

The bullfinch lives throughout the wooded areas of Europe and Asia. It is now frequently found in developed areas and is also common on cultivated land. During the past 50 years the bullfinch's natural habitat has been drastically reduced because of the expansion of urbanized areas. An increase in the species's natural habitat,

and of the wild seeds and fruits that it feeds on, might prevent it from damaging crop growth in orchards.

The bullfinch spends most of its time in trees and is rarely seen on the ground. Even when it lives near people, the bullfinch prefers the privacy of dense undergrowth for its nest.

DID YOU KNOW?

- The bullfinch can carry so much food in its cheek pouches that its young need to be fed only every half hour.
- The bullfinch prefers the seeds of the ash tree. But the

ash produces a good crop in alternate years only, making it possible for farmers and bird watchers to predict when the birds are most likely to raid fruit orchards and gardens.

BREEDING

In early spring the male bullfinch attracts a female by bringing her twigs. If she is willing to mate with him, the two pair for life.

Soon after mating, the female builds a nest of roots hidden among the thick twigs of a bramble or hawthorn bush. She lines the nest with animal hair that she has gathered from the area.

Once the nest is completed, the female lays a clutch of pale blue, purple-flecked eggs. She incubates the clutch for 12 to 14 days, and the male feeds her during this time.

When the eggs hatch, the male provides food for both the female and the chicks. But

as the young grow, the female also helps to feed them. The chicks are given a predigested mixture of insects and seeds, which the adults carry back to the nest in their cheek pouches.

The young birds leave the nest after two weeks. The adult pair mates again, and the female begins building another nest. But the young birds remain in the area, and during winter the adults and their young from several broods feed together in family groups.

Right: Both parents feed the chicks with predigested food from their cheek pouches.



PRINCESS PARROT

CARD 57

GROUP 2: BIRDS

ORDER
Psittaciformes

FAMILY
Psittacidae

GENUS & SPECIES
Polytelis alexandrae



The rare princess parrot lives a nomadic life. It travels through sparsely populated areas of western Australia in search of the flowering acacia it likes to eat.

KEY FACTS



SIZES

Length: 1½ ft.
Weight: About 4 oz.



BREEDING

Sexual maturity: 3-4 years.
Nest site: Eucalyptus tree.
No. of eggs: 4-6.
Incubation: About 3 weeks.
Fledging: 2-3 months.



LIFESTYLE

Habit: Pairs or groups up to 20.
Diet: Grass seeds, berries, herbaceous plants, and acacia blossoms, fruit, and seeds.



RELATED SPECIES

Other *Polytelis* species include the superb parrot, *P. swansonii*, and the regent parrot, *P. anthopeplus*.



Range of the princess parrot.

DISTRIBUTION

Although a rare bird, the princess parrot can be found in the interior of central and western Australia wherever there is scattered scrub.

CONSERVATION

Rarely seen at any time, this endangered species is totally protected by law.

FEATURES OF THE PRINCESS PARROT

Female coloring: Very similar to the brightly colored male princess parrot but slightly duller.

Tail: Very long and conspicuous.

Female

Male

Male coloring: Crown and sides of head are light blue. Upper flight feathers are olive, and rump is violet.



Eggs: 4-6 eggs are incubated for about 3 weeks. Eggs are laid on decayed wood dust.

*Found in the dry areas of western Australia,
the princess parrot is an especially
beautiful bird. It is much in demand
for aviaries because it usually thrives
and breeds well in captivity.*



BREEDING

The courtship display of the male princess parrot, like that of other *Polytelis* species, is characterized by a marked dilation of the eye pupils. The bird also bows and bobs its head and erects a few frontal feathers to form a tiny crest. During the breeding season, male princess parrots often become aggressive toward their mates. The females tend to be clumsy, and they frequently break eggs upon entering or leaving the nest.

Princess parrots normally nest between September and December. They lay four to six eggs in holes on the forks of large eucalyptus or casuarina trees. Small groups often form nesting colonies in the same tree.

The nesting birds make no attempt at nest building. Instead, they lay their eggs

Left: Princess parrots are remarkably tame and easy to approach.



directly on the dust of the decaying wood. Incubation takes approximately three weeks, and only the female sits on the eggs.

Princess parrots often breed in areas where they have not been seen before. Once the chicks can fly, the birds leave the area and never return.

Above: The princess parrot flies high and apparently effortlessly.

Below: The parrots are usually found in pairs, although they are rarely seen by humans.

HABITAT

Princess parrots usually live near acacia or eucalyptus trees in dry scrubland, often far from water. These birds

are nomadic, following the flowering of the acacia. They are normally found in pairs or small groups.

DID YOU KNOW?

- Normally very quiet, the princess parrot has a loud, unmelodic call. On long flights it makes contact with a long chattering note.
- When traveling long distances, the princess parrot flies high and very fast. Its wingbeats seem almost effortless.
- The princess parrot is fully protected by law from capture and is registered as an endangered species.
- In the wild, princess parrots are surprisingly tame and easy to approach. If alarmed, they will fly off a short distance and resettle nearby.

FOOD & FEEDING

Princess parrots feed mainly on grass seeds and ground-hugging herbaceous plants. They also eat fruits, blossoms, berries, and occasionally insects. They favor the fruit and blossoms of the acacia tree. Specimens collected for museums have been found to have eaten acacia seeds.

The parrots seem to change their location to coincide with the seasonal plant growth, so they are assured of food year-round. The princess parrot is a dry country bird and seldom feeds in wet areas.

PRINCESS PARROT & MAN

Acclaimed as one of the most beautiful Australian parrots, the princess parrot is a well-established aviary species and breeds well in captivity. It does best in large aviaries, where it is less likely to become too tame. Hybrids have been created by breeding with other *Polytelis* species, and with the red-winged parrot and the Amboina king parrot. Too rare to be of value to bird catchers, the princess parrot and its young are occasionally caught and eaten by Australian Aborigines.



CUCKOO

CARD 59

GROUP 2: BIRDS

ORDER
Cuculiformes

FAMILY
Cuculidae

GENUS & SPECIES
Cuculus canorus



The first migrating cuckoos reach Europe from Africa in mid-April. They seek out the habitats of smaller bird species, which they select to act as host parents for cuckoo chicks.

KEY FACTS



SIZES

Length: 1 ft.
Wingspan: 2 ft.
Weight: 4-5 oz.



BREEDING

Breeding season: May to July.
Eggs: Up to 25; usually 9, 1 laid in each nest.
Incubation: 12-13 days.
Fledging period: 17-19 days; independent at 50 days.



LIFESTYLE

Call: Male, "koo-koo." Female, bubbly chuckle.
Habit: Solitary; pairs briefly during breeding season.
Diet: Insects and their larvae.



RELATED SPECIES

Closest relative is the oriental cuckoo, *Cuculus saturatus*, from Asia. Of the 128 species of cuckoo, 12 are members of the genus *Cuculus*.



Range of the cuckoo.

DISTRIBUTION

Breeds throughout Europe and much of Asia. Winter range is in central and southern Africa, Southeast Asia, and the Philippines.

CONSERVATION

Current population trends are uncertain. A decrease in numbers in recent decades may result from loss of habitat and insecticide use. The species is now protected.

FEATURES OF THE CUCKOO

The female cuckoo replaces a host bird's egg with one of her own for incubation.



Cuckoo uses a nest built by a breeding pair of a different species.

Plumage is pale, with gray-striped underbelly like a sparrow hawk's. Possibly an adaptation for scaring a smaller bird from its nest.

THE EGG AND CHICK



Cuckoo egg: Speckled and larger than others in nest. May be similar color so that host bird will incubate it.



Hatching: Cuckoo chick usually hatches first and pushes other eggs from the nest.



The cuckoo is known for laying its eggs in other birds' nests. The host parents then incubate the egg and feed the cuckoo chick—even after it grows to be much larger than they are.

MIGRATION
The adult cuckoo leaves its European breeding grounds in July to spend the winter in warm central or southern Africa. It returns to Europe the following April to breed again. Reared by its non-cuckoo host parents, the immature cuckoo leaves later—between August and September. Instinct leads the young cuckoo to the regular winter range. Here, the cuckoo remains quiet and inconspicuous throughout the winter.



Far left: *The young cuckoo often has red-brown plumage.*

Left: *The chick is born with a strong instinct for survival.*

Below: *An adult sedge warbler feeds the cuckoo chick that it has hatched.*

DID YOU KNOW?

- The European cuckoo's preferred host parent species include pipits, warblers, and robins.
- A cuckoo chick's calls may lure birds other than its host parents to feed it.
- The cuckoo is named for the sound of its call in most countries: France, coucou; Holland, koekoek; Germany, kuckuk; and Japan, kak-ko.

BIRDWATCH
The cuckoo's two-note call is easily recognized and can be heard in the evenings in its summer range between mid-April and June. Although the call carries over long distances, spotting the bird can be difficult; it has dull plumage and tends to hide within leafy cover. Male and female adults look similar, but the immature cuckoo has a white spot on the nape of its neck. Its plumage is often red-brown instead of gray with stripes.

FOOD & FEEDING
The cuckoo finds most of its insect diet among bushes and trees. It feeds on the ground as well, but the bird is clumsy when walking. It snaps up any insect larvae it finds. The female cuckoo tries to find the nests of insect-eating host birds to ensure the right diet for her young. The cuckoo chick is fed by the host birds on a diet of caterpillars, grasshoppers, flies, beetles, and small snails. Below left: *The cuckoo feeds exclusively on insects and larvae.* Below right: *This cuckoo egg will be incubated like the dunnock egg it replaced.*



HABITAT
The European cuckoo returns from Africa during the spring to breed. It inhabits varied types of countryside, including marshes, woodland borders, open farmland, and areas with abundant shrubbery around open fields. These habitats are most likely to be the habitats of the smaller birds that the cuckoo chooses as host parents to the young whose eggs are laid in the nest. In flight, the cuckoo resembles a sparrow hawk, with its long, pointed wings and gray-striped underparts.



BREEDING
The cuckoo forces the rearing of its young onto birds of different species. The breeding adult female usually looks for host birds of the same species that reared her. In late May she lays one egg in each of about nine different nests after each host pair has laid its own eggs. The cuckoo chooses hosts of a species whose eggs closely resemble her own. Cuckoo eggs are small in relation to the bird's size and similar in size to the host's eggs. It takes the cuckoo only a few seconds to remove an egg belonging to the host bird and replace it with one of hers. This keeps the number of eggs in the nest the same. The cuckoo has evolved a short incubation period, so its chick usually hatches before the host bird's eggs. Although blind and featherless at birth,

the cuckoo chick shifts the other eggs, one at a time, onto its back to toss them from the nest. The newborn cuckoo tries to remove any hatched chicks in the same way. The cuckoo chick soon grows far larger than its host parents, who continue to feed it. At three to four weeks old it has increased 50 times in size and is ready to leave the nest.



TUFTED DUCK

CARD 60

GROUP 2: BIRDS

ORDER
Anseriformes

FAMILY
Anatidae

GENUS & SPECIES
Aythya fuligula



The tufted duck is one of the best known of all the freshwater diving ducks. Both male and female sport the distinctive drooping crest that gives the duck its name.

KEY FACTS



SIZES

Length: 1–2 ft.
Wingspan: 2–3 ft.
Weight: 1–2 lb. Males heavier than females.



BREEDING

Sexual Maturity: 1–2 years.
Mating season: May to August.
Incubation period: 23–28 days.
No. of eggs: 8–11, gray-green.
Fledging period: 45–50 days.



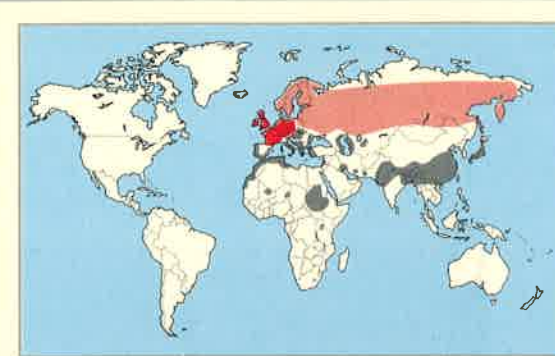
LIFESTYLE

Habit: Migratory, freshwater diving duck.
Diet: Mollusks, crustaceans, insects, seeds.
Lifespan: Oldest known bird, 14 years.



RELATED SPECIES

Include the greater scaup, *Aythya marila*, and the ferruginous duck, *A. nyroca*.



■ Year-round ■ Wintering areas ■ Breeding areas

DISTRIBUTION

Breeds throughout central Europe and Asia from Iceland to northern Japan. Winters in southern Europe, Africa, and southeast Asia. Resident only in western Europe.

CONSERVATION

Widespread and numerous despite pollution and habitat loss. Its population is steadily increasing.

FEATURES OF THE TUFTED DUCK

Male: White flanks and underbelly. Feathers on the back of head are glossy purple. In flight the wings are long and pointed.



Nest: The female builds a simple grass and down-lined nest close to the water's edge.

Female: Uniformly brown, with a white patch at the base of the bill.



Eggs: The female lays 8 to 11 gray-green eggs.

The tufted duck is Europe's most common diving duck, and it is second only to the mallard in its willingness to colonize man-made habitats. Reservoirs, flooded gravel pits, boating lakes, and even small city park ponds are home to this dainty, golden-eyed duck.



FOOD & HUNTING
 The tufted duck is an excellent diver; it spends hours each day foraging underwater. Each dive begins with a swift forward leap that allows the duck to arch its neck and plunge its beak steeply into the water. It descends with powerful strokes of its webbed feet. Males can remain underwater for up to 30 seconds, although most dives last half that time. Water snails and other mollusks are its main prey, together with various crustaceans, small fish, and aquatic insects. The tufted duck also grazes on water plants and the seeds of milfoil and spike rush. It may *upend*, or dabble for food, catching insects and their larvae living on the water's surface.

Occasionally the tufted duck forages on land, since it is fond of cereal grain. City-dwelling ducks will take handouts from people who feed them in parks.

Left: *The tufted duck usually chooses a lakeside habitat, surrounded by dense reeds or other marsh vegetation.*

Middle right: *Ducklings fledge after about eight weeks.*



BREEDING
 The tufted duck finds a new mate each year. Some birds pair before migrating, while others find a partner when they reach the breeding site. The ducks court communally in noisy displays that involve head shaking, bill dipping, and ritual wing preening.

The birds arrive at the winter breeding grounds from March to May and begin nesting. The nest is usually located in a clump of reeds or among bankside foliage.

When the female has laid the eggs, she incubates them for 25 days, covering them with an insulating layer of down whenever she leaves to feed.

The young tufted duck is able to feed itself within hours of hatching, and it fledges at eight weeks. By September the young ducks are ready for the long flight south to their winter quarters.

Top left: *Island nesting sites offer protection from predators and humans.*

Left: *The female usually cares for her chicks for eight weeks, although she may desert them sooner if her summer molt (feather shedding) begins early.*

HABITAT

Found throughout the central, more temperate regions of Eurasia and Africa, and from the Atlantic to the Pacific coasts, the tufted duck resides only in western Europe. Elsewhere it is migratory, breeding as far north as Lapland and wintering as far south as Ethiopia. A freshwater species, the

tufted duck is rarely seen at sea except during its seasonal migrations or during periods of extreme cold. Although its habitat varies, it favors large lowland lakes, flooded marshes, and ornamental lakes and ponds. In winter, huge flocks gather on coastal lagoons, estuaries, and reservoirs.



BIRDWATCH

In its range, the tufted duck is a familiar sight on large lakes and reservoirs. During breeding season the male is easy to identify by the purple sheen of its black plumage and its characteristic crest feathers. Its tendency to gather in large flocks, and its bright white flanks and belly make the bird

easy to recognize. The female's crest is barely noticeable, and she is harder to recognize, although she has the same profile as the male. Some females also have white feathers at the base of their bills and can thus be confused with the female scaup duck.

DID YOU KNOW?

- In flight, the tufted duck's wings make a characteristic whistling sound.
- Tufted ducks often nest within gull or tern colonies, probably because the gulls drive off crows and other egg thieves.
- Adapted for diving, the tufted duck has short, pointed wings, which

- make taking flight difficult. The duck must patter quickly across the water before it can become airborne.
- During courtship the male tufted duck contracts the pupils of its eyes so that the golden irises glow with a dazzling brilliance.

JACKDAW

CARD 63

GROUP 2: BIRDS

ORDER
Passeriformes

FAMILY
Corvidae

GENUS & SPECIES
Corvus monedula



The smallest of the European crows, the jackdaw is notorious for its stealing. It has a taste for bright things, and has even been known to steal a lighted cigarette and set fire to its nest.

KEY FACTS



SIZES

Length: 1 ft., both sexes.
Wingspan: 3 ft.
Weight: 8 1/2 oz.



BREEDING

Sexual maturity: 1-2 years.
Breeding season: April to June.
No. of broods: 1.
Incubation: 17-18 days.
Fledging period: 28-32 days.



LIFESTYLE

Habit: Sociable. Pairs for life.
Diet: Fruit, grain, insects, eggs, nestlings, small mammals.
Call: Warbles, trills, harsh "chak."
Lifespan: Rarely more than 14 years.



RELATED SPECIES

Closest relative is the daurian jackdaw, *Corvus dauuricus*, from China. Others in the family include the raven and the rook.



Range of the jackdaw.

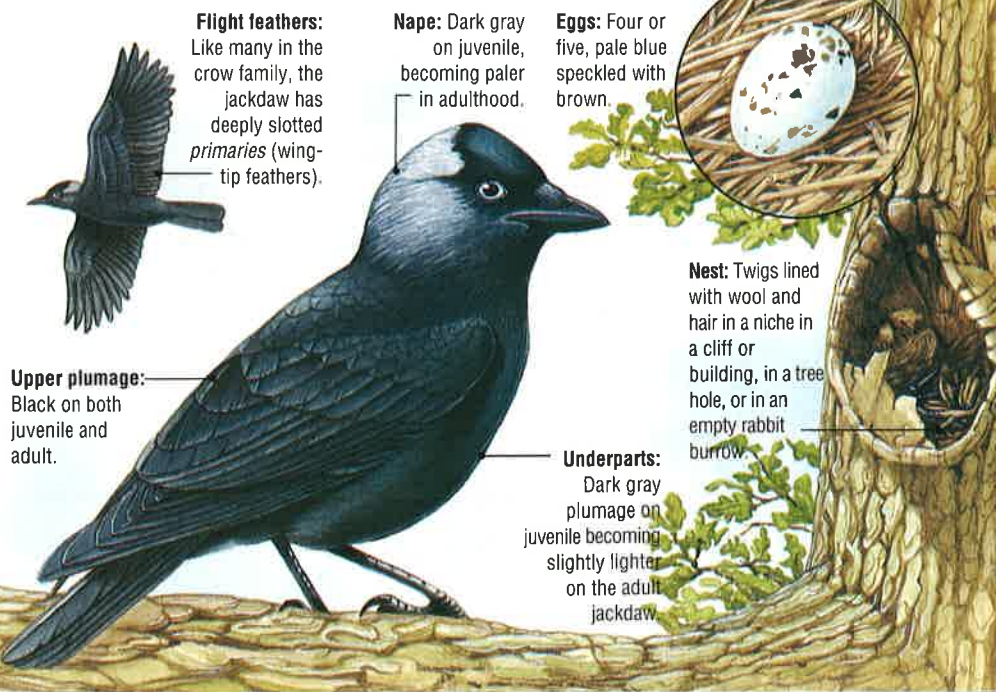
DISTRIBUTION

Found in most of Europe except in northern Scandinavia. Also located in west and central Asia, and northwest Africa.

CONSERVATION

An estimated 400,000 pairs exist in Great Britain alone. Numbers are stable and may even increase.

IDENTIFYING THE JACKDAW





The jackdaw, an intelligent bird that lives in flocks, often roosts with its relative, the rook.

Inquisitive and quick to adapt to human presence, it takes advantage of any food it can find and even nests under the eaves of houses. Its numbers are steadily increasing and it can be seen throughout the year in most of Europe.

FOOD & FEEDING

The jackdaw often steals nestlings or eggs from unguarded nests, but it mainly eats worms and insects, especially insect larvae.

Near farms the jackdaw eats grain and shiny fruit such as cherries. In rural areas it preys on small mammals such as field mice and voles, and near towns it scavenges for food in dumps.

Left: The jackdaw's gray nape and silver-blue eyes distinguish it from the rook.

If food is plentiful, the jackdaw stores it under logs or leaves it to eat when the weather worsens. In harsher climates, birds dig through snow to reach food stores.

The jackdaw's short, strong bill gives it a firm grip on its food. It holds larger items with its feet while using the bill to tear off small pieces.

Right: The jackdaw pecks at bark to find insect larvae, one of its favorite foods.



DID YOU KNOW?

- The jackdaw sometimes dips food into water before eating it.
- People once believed slitting the jackdaw's tongue would make it mimic the human voice, but the birds do not use their tongues to form sounds.
- The jackdaw gets its name from the harsh "chak" or "jack" sound it makes before roosting at night.
- The jackdaw sometimes plucks wool from a sheep's back for its nest lining.



BIRDWATCH

Although it looks similar to a rook, raven, or crow, the small gray patch at the nape of the jackdaw's neck and its light blue eyes make it look different. Look for flocks of more than 200 birds. The jackdaw flies

erratically, using rapid wingbeats, but it moves on the ground with a cocky strut. Listen for many calls ranging from the melodious to the harsh "chak" sound it makes before roosting at night.

HABITAT

The jackdaw lives in a variety of habitats—in towns, around sea cliffs, in woods, and on open land. It originally lived only among rocky cliffs, but it has adapted to more populated areas and often nests

in buildings.

Living close to human populations ensures the jackdaw a good supply of food. The jackdaw carries off baubles and beads from humans and hides them.

Right: The jackdaw has the same sleek, black plumage and intelligence as its relatives the carrion crow, rook, and raven, but it is smaller.



Left: A jackdaw nests in a tree hole that provides warmth and security for the young.



Left: Hungry chicks wait for their parents. Now covered with only small flight feather stubs, they will fly at one month and reach maturity at two years.

BREEDING

The male jackdaw courts his mate by bowing to her, showing her the gray feathers at the nape of his neck. The pair stays together for life, returning to the same area to

rear young each year.

The jackdaw builds its nest in chimneys, holes in buildings, cliffs, trees, and even old rabbit burrows. Both adults build the twig nest lined with fur and wool.

The female lays four to five eggs which she incubates for 17 to 18 days while the male brings her food.

The parents feed the newly hatched chicks food from a special sac inside the throat. The nestlings are ready to leave after 28 to 32 days, but the parents feed them for several more weeks before the juveniles leave the territory many months later. The young breed in two years.