

HOUSE MARTIN

CARD 65



GROUP 2: BIRDS

ORDER
Passeriformes

FAMILY
Hirundinidae

GENUS & SPECIES
Delichon urbica



The house martin makes its home in both city and country and is one of Europe's most familiar summer visitors. It races and swoops overhead in its constant search for insects.

KEY FACTS



SIZES

Length: 5 in.
Weight: Up to 1 oz.
Wingspan: 10–11 in.



BREEDING

Sexual Maturity: 1 year.
Breeding season: May to September.
No. of broods: 1–3.
Eggs: 4–5, white, occasionally red-spotted.
Incubation: About 2 weeks.
Fledging: About 4 weeks.



LIFESTYLE

Habit: Migratory, sociable.
Diet: Insects.
Lifespan: Usually 5–6 years.



RELATED SPECIES

The house martin is a member of the swallow family, of which there are 74 species.



■ Summer range of the house martin. ■ Winter range.

DISTRIBUTION

During summer the house martin is found throughout Europe and across Asia to Japan. During winter it is found further south, in Africa and Indochina.

CONSERVATION

Although common and widespread, the house martin has declined in recent years. This is probably due to the loss of wetland habitats that are rich in insect life.

FEATURES OF THE HOUSE MARTIN

Plumage: Adult male and female look similar. Juvenile is brown, without the adult's glossy blue-and-black back.



Mud collecting: House martin scoops up mud in its bill and plasters it onto the nest. Each completed nest is made up of about 2,500 "bills" of mud.



House sparrow may steal a vacant nest or force out a resident martin.

Blood-sucking parasites infest the bird. Large numbers can kill a juvenile.



DID YOU KNOW?

- The house martin is believed to sleep while flying.
- The house martin has a wide-opening mouth.
- The house martin has colonized big cities because today's air pollution controls allow more insects to thrive there.
- The adult feeds its young balls of insects that it forms in special throat pouches.

BREEDING

The male and female pair during their northward spring migration. When they arrive at the breeding site, they use an old nest or build a new one. Once the pair chooses a nest site, they collect mud by scooping it up in their bills; they then carry it back to plaster onto the nest.

The nest is round and cup-shaped and is often located under the eaves of a house. Before houses existed, house

martins probably nested on cliffs; some still use cliff sites today.

The female lays four to five white eggs that hatch after two weeks. Both birds incubate the eggs and feed the young, which fledge at about one month. Most pairs raise a second brood the same season.

Left: *The number of nests in a colony may range from a few to several hundred.*

Each spring the house martin arrives in huge flocks at its breeding site. It builds its mud nest under the eaves of a house and raises two or more broods during the summer. It migrates at the beginning of autumn to spend the winter in Africa's warm climate.

HABITAT

During the summer months the house martin is found in most open areas throughout its range: parks, gardens, farm fields, and city squares. About 500,000 pairs breed every year.

The house martin rarely lands on the ground. It spends most of its time in the air and often perches on power lines or twigs. When it does land, it is only to collect mud for nest building.

At the end of summer, the house martin leaves its breeding grounds and flies south to Africa, where it spends the winter before returning the following spring to breed.

FOOD AND FEEDING

The house martin feeds on insects and especially prefers aphids and small flies. It catches prey in midair, often darting up to grab it from below.

The house martin migrates when insects become scarce at the end of summer. In late September and early October the house martin and its young gather together, often perching in large numbers on power lines before they begin their migration to Africa, where insects are more plentiful.

Right: *Noisy flocks gather on power lines ready for their long journey south.*



Above: *Male and female build the nest under the eave of a roof.*



Left: *Chick awaits the return of its parents.*



BIRDWATCH

The house martin is not timid. During summer it can be spotted almost anywhere within its range.

The house martin can be seen hunting for insects or entering and leaving its nest. It is rarely seen on the ground,

except when scooping up mud for its nest. When it waddles around a puddle it often raises its wings and tail.

The house martin's flight is swift and fluttering. It makes soft twittering calls during flight.

PEACOCK

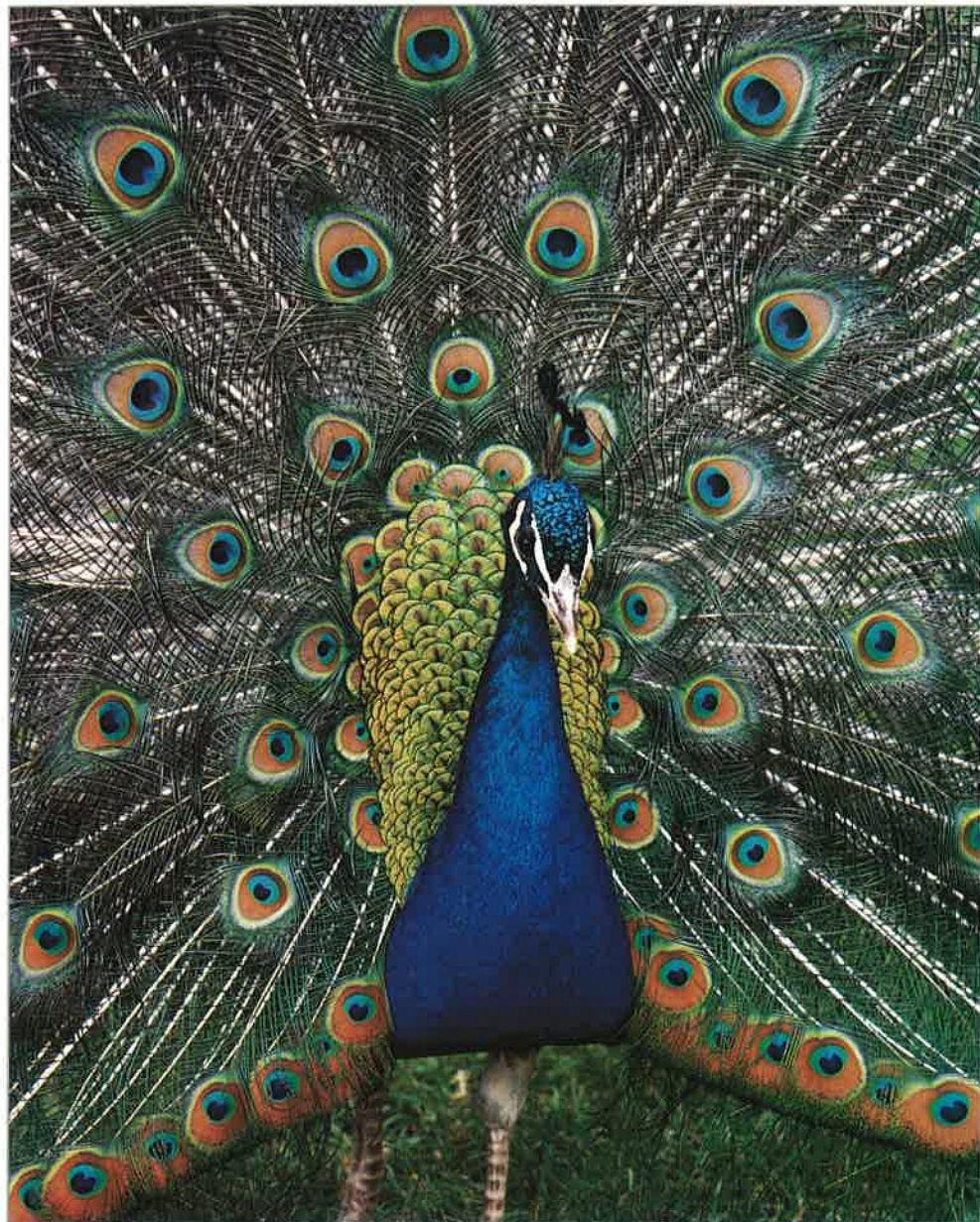
CARD 66

GROUP 2: BIRDS

ORDER
Galliformes

FAMILY
Phasianidae

GENUS & SPECIES
Pavo cristatus



The peacock is, in fact, the male blue peafowl. Introduced into Mesopotamia 4,000 years ago, this colorful ornamental bird can now be seen all over the world.

KEY FACTS



SIZES

Length: Male, 3-4 $\frac{1}{2}$ ft. Female, 2 $\frac{1}{2}$ -3 $\frac{1}{2}$ ft.

Tail length: Male, 4-5 ft.

Weight: Male, 9-13 lb. Female, 6-9 lb.



BREEDING

Sexual maturity: 2-3 years.

Breeding season: Mainly April to September.

No. of broods: 1.

Eggs: 4-6.

Incubation: 28 days.



LIFESTYLE

Habit: Small, sociable groups of 1 male with 3-5 hens.

Diet: Grain, seeds, berries, insects, snakes, mice.



RELATED SPECIES

There are 2 other species of peafowl: the closely related green peafowl of southeast Asia and the Congo peafowl, confined to the Ituri forest in Zaire.



Range of the blue peafowl.

DISTRIBUTION

India and Sri Lanka. Introduced worldwide as a captive bird, it lives wild or semiwild in some places.

CONSERVATION

The blue peafowl is revered and protected by law in its native habitat. Common as an ornamental bird throughout the world, it appears to be in little danger of extinction.

FEATURES OF THE BLUE PEAFOWL



Male: Metallic green back. Black and dark green lower breast, abdomen, and flanks. Long train.

Train: The cock's train is made up of covert feathers. In most birds these are small, overlapping feathers, but the peacock's covert feathers have outgrown the tail feathers.

Eggs: Four to six thick-shelled, creamy white eggs laid in a hole in the ground.



Crest: A crown of blue crest feathers adorns the male and female.

Female: The crest and upper neck have chestnut brown feathers outlined with a bronze green.



The blue peafowl is best known for the cock's bright train of feathers, which he displays to the female as part of a courtship ritual. A bird of habit, the peafowl eats and sleeps in the same area its whole life. Although known as an ornamental bird, the peafowl is difficult to domesticate.

HABITS

The blue peafowl lives in small groups in hilly forest areas. During the day it sits in thickets, moving into the trees at dusk to roost for the night. It screeches loudly as it climbs the trees in the late afternoon.

A sociable animal, the peafowl lives around human settlements. But in the wild its colorful plumage camouflages it among the trees.

The peafowl sticks to routines. It keeps the same

roost and feeds in the same place every day. The cock always displays in a specially chosen place.

Preyed upon by tigers and leopards in the wild, the peafowl often acts as a warning signal for other game animals. It notices the big cats before the other creatures do and hoots a loud alarm call.

Right: Iridescent "eyes," said to have hypnotic qualities, adorn the peacock's fan.

BREEDING

During breeding season, the peacock opens up his long, colorful train and postures and struts in front of a small group of females, or *peahens*.

The females show some indifference to the male's display before one of the hens lies down in front of the cock. He then folds his fan and treads on her before mating.

The female lays her eggs in a hole in the ground. They hatch after 28 days, and the chicks peck at the mother's beak, signaling that they are hungry. The female picks up pieces of food and drops them on the

ground for the chicks to pick up and eat. Small feather crowns appear on the chicks after one month, but it takes up to three years for the cocks' trains to reach full size.

Right: At dusk, this peacock climbs a tree to roost with other peafowl for the night.

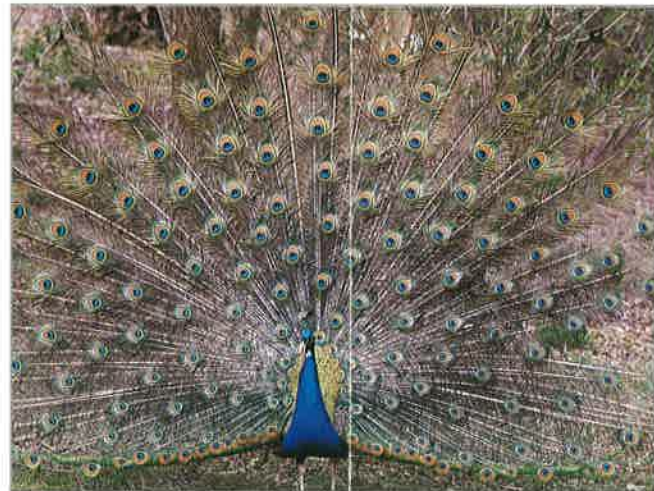
Below: A peahen places food in front of her chicks to teach them how to eat.



Left: During the heat of the day, the peafowl finds shade in the dense forest undergrowth.

DID YOU KNOW?

- Peacock chicks, and even young hens, often try spreading their tail feathers in imitation of the male's train.
- Indians believe the call of the peafowl means rain will fall.
- The average peacock's train contains more than 200 feathers.
- The export of peacock train feathers from India is now illegal.
- One reason the peacock struts back and forth during his display is to keep his balance as the wind catches the enormous fan.



PEAFOWL & MAN

The peafowl is considered sacred in many villages in its native range. It is a symbol of the goddess of learning and the god of war. It nests and walks freely through these villages.

Roast peafowl used to be considered a great delicacy,

and the peacock's tail feathers have long been prized for their decorative value.

The peafowl has been used as an ornamental bird worldwide because of its beauty, adaptability, and hardiness. Many stately homes in Great Britain have their own flocks.

FOOD & FEEDING

The peafowl emerges from the dense forest in early morning to feed at its regular spot and find water. It eats almost anything, but mainly feeds on seeds, fruit, insects,

and sometimes snakes and mice.

At dusk the peafowl returns to the same watering hole before climbing up a tree to roost for the night.



Left: Peafowl always live near a convenient water source to drink at dawn and dusk.

COMMON SANDPIPER

CARD 68

GROUP 2: BIRDS

ORDER
Charadriiformes

FAMILY
Scolopacidae

GENUS & SPECIES
Actitis hypoleucos



The common sandpiper is a solitary bird that wades in the shallows of freshwater lakes and streams. The bird bobs continually while it is feeding.

KEY FACTS



SIZES
Length: About 8 in.
Wingspan: 15 in.
Weight: 1-3 oz.



BREEDING
Sexual maturity: 1 year.
Breeding season: March to August.
No. of eggs: 3-5, cream-colored with brown markings.
Incubation: 21-25 days.
Fledging period: 25 days.



LIFESTYLE
Habit: Migratory wader. Solitary in winter and when breeding; migrates in small flocks.
Diet: Beetles, flies, spiders, snails, and worms.
Lifespan: Oldest known bird, 10 years, 3 months.



RELATED SPECIES
Closest relative is the spotted sandpiper, *Actitis macularia*, of North America.



■ Range of the common sandpiper. ■ Winter range.

DISTRIBUTION

Wide-ranging bird that breeds throughout most of Europe and northern Asia. Migrates to Africa, India, east Asia, and Australasia for winter.

CONSERVATION

There has been some decline in numbers because of the deterioration of freshwater habitats. But the species remains numerous and is not endangered.

FEATURES OF THE COMMON SANDPIPER

Wings have white bars and are curved back in flight. The common sandpiper flies low over water.



Eggs are cream- or pale green-colored, with red-brown speckles. Three to five are laid in a woven nest or in a hollow on the ground near water.

Plumage (feathers) is gray-brown above with brown bars. Underparts are off-white. Short legs are pale gray-green.



Bill is straight and pointed, used to probe for worms, shellfish, insects, or other invertebrates.



The common sandpiper is one of the most familiar of all small wading birds in Europe and northern Asia. But after the summer breeding season, these birds head south to a warmer climate.

BIRDWATCH

The common sandpiper returns to its summer range in the spring. The birds begin to appear in April and remain until September. They can most often be seen by freshwater marshes and estuaries (waters where river and sea meet).

The sandpiper is about the same size as a starling. Its habit of bobbing while feeding makes it easy to spot at a distance. The bird has a white marking between its wing and breast. It glides low over the water while in flight.

HABITAT

The common sandpiper can usually be found at the edges of freshwater ponds, lakes, rivers, and streams. It prefers stony areas to sandy or muddy shorelines, but it also feeds at coastal marshes and saltwater swamps and lagoons.

The sandpiper flies thousands of miles each year between its breeding grounds in northern Europe and Asia and its winter quarters in southern Africa, India, eastern Asia, and the southern Pacific waters around Australia. Solitary through most of the year, the sandpiper will congregate in small flocks while migrating.

DID YOU KNOW?

- The common sandpiper often washes its food before eating it.
- During winter in Africa, the sandpiper can be seen resting on the backs of aquatic

animals, such as the hippopotamus.

- To draw a predator's attention away from the nest, the adult sandpiper often acts as if it has a broken wing.

FOOD & FEEDING

The common sandpiper darts about on short legs, searching at the water's edge for food. It uses its straight, pointed bill to probe for and capture such insects as earwigs and butterflies, as well as spiders, snails, and worms.

The sandpiper feeds most of the day. It often pauses midday to rest and *preen* (clean and smooth) its feathers.

Around livestock farms, the common sandpiper searches the animal droppings to find beetles or fly larvae.

Right: A sandpiper uses its bill to pick worms and other prey from the mud.



BREEDING

Pairing and mating may occur either before or after the spring migration to the breeding grounds. Aerial displays, called "flitter fights," help establish pair bonds, and the males and

females often sing as they fly together low over the water.

A pair of sandpipers establishes and defends a breeding territory along the edge of a freshwater lake or stream.

The nest is always on the ground close to water—usually concealed among thick vegetation. It varies from a simple hollow to a well-built, grass-lined, cup-shaped construction.

The adults take turns incubating the eggs. The chicks hatch from the eggs fully feathered. The parents then lead the *clutch* (group of chicks) away from the nest to an area where there is food and cover from predators. Although able to forage almost at once, the chicks remain close to the adults for up to three weeks.

The male leaves when the chicks are about 12 days old; the female leaves about two weeks later, when the young are ready for the flight south.

Above left: A sandpiper stretches its wings in preparation for flight.

Right: The sandpiper's brown-flecked wings and head camouflage it from predators. Here, an adult guards its newly hatched young among thick vegetation.



HAWAIIAN HONEYCREEPER

CARD 70



GROUP 2: BIRDS

ORDER
Passeriformes

FAMILY
Drepanididae

GENUS & SPECIES
Various



About 22 honeycreeper species have evolved from a single species that was blown off course to the Hawaiian islands.

KEY FACTS



SIZES
Length: 4-8 in.
Wingspan: 6-12 in.



BREEDING
Sexual maturity: 1 year.
No. of eggs: 2-3.
Incubation: 3-4 weeks. Both parents may feed the young.



LIFESTYLE
Diet: The Hawaiian honeycreepers fall into two main dietary groups—nectar eaters and seed eaters. Nectar eaters may also eat spiders, caterpillars, and insects.



RELATED SPECIES
The Hawaiian honeycreepers are unique and have evolved separately. Another group of birds known as honeycreepers exists in the Western Hemisphere from Mexico down through most of South America and the West Indies.



Range of the Hawaiian honeycreeper species.

DISTRIBUTION

The Hawaiian honeycreepers are confined to the Hawaiian Islands. Once widespread among the islands, many honeycreepers are now confined to the most inaccessible areas.

CONSERVATION

The Hawaiian honeycreeper is in grave danger of becoming extinct. The destruction of its habitats must be stopped.

FEATURES OF THE HAWAIIAN HONEYCREEPER

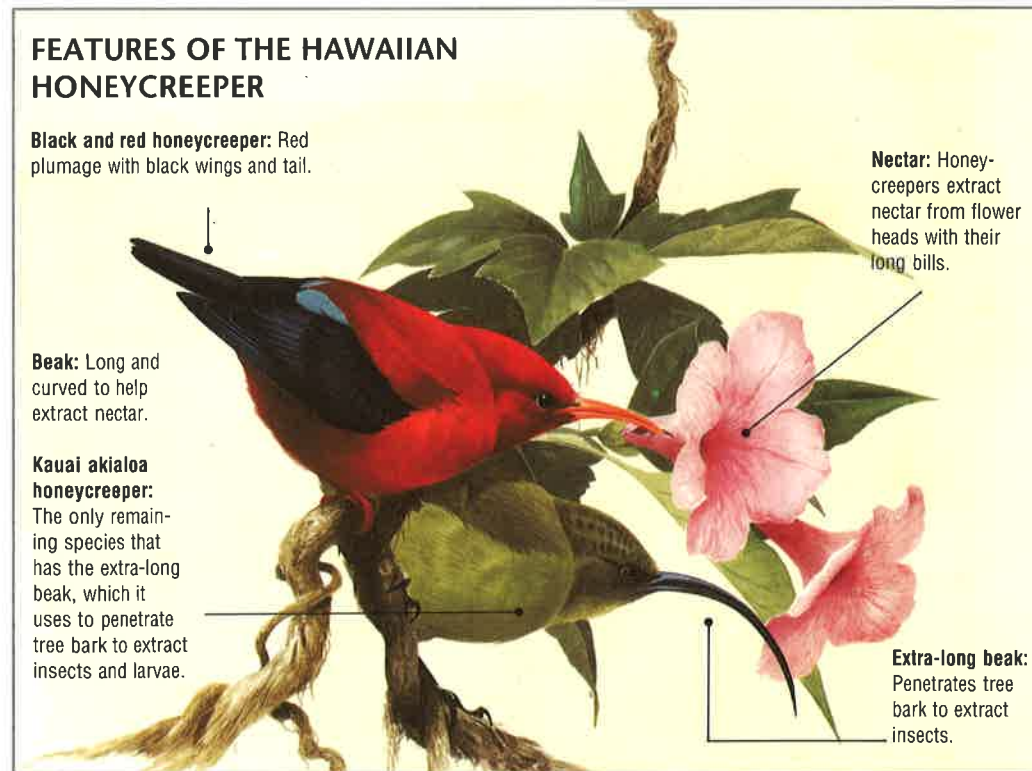
Black and red honeycreeper: Red plumage with black wings and tail.

Beak: Long and curved to help extract nectar.

Kauai akialoa honeycreeper: The only remaining species that has the extra-long beak, which it uses to penetrate tree bark to extract insects and larvae.

Nectar: Honeycreepers extract nectar from flower heads with their long bills.

Extra-long beak: Penetrates tree bark to extract insects.





FOOD & FEEDING

The Hawaiian honeycreeper is descended from nectar-eating birds that were blown off course in the Pacific Ocean and landed in Hawaii. Over time, some of the nectar-eating birds broadened their diet, depending on available foods.

Hawaiian honeycreepers are divided into subgroups. Birds of one group have red and black feathers and feed mainly on nectar, while those belonging to the other group have

green and yellow feathers. Rather than feeding on nectar, they eat seeds.

The shape of each group's bill has evolved over time. The nectar eaters' curved bills and brush-shaped tongue tips enable the birds to collect every drop of nectar from a flower.

The seed eaters have shorter bills, designed for cracking the seeds that are the bulk of their diet.



Far left: *The honeycreepers live in both inaccessible rainforests and drier areas.*

Left: *The black and red honeycreeper has a downward-curving red beak to extract nectar from flowers.*



The Hawaiian honeycreeper's evolution into many different species occurred because it did not need to specialize its feeding habits. Each species eats a varied diet, depending on the type of food available.

HABITAT

Most honeycreepers live in the inaccessible regions of Hawaii's forests. Still, as the human population expands, even the honeycreeper's most remote habitat is becoming threatened. The palila honeycreeper, for example, is

dependent on the mamane tree for its survival, but the felling of these trees has forced the bird to find new habitats. Today the palila honeycreeper is found only on one slope of Mauna Kea on the island of Hawaii.

BREEDING

All Hawaiian honeycreepers breed similarly. They mate between December and July; the young hatch the following January.

The birds build a simple, cup-shaped nest on the branch of a tree or occasionally in long grass; there they lay two to three eggs. The eggs are white or bluish with distinctive reddish-brown spots. The eggs hatch after about a three-week incubation and both parents feed the young on regurgitated food.

PREDATORS

The Hawaiian honeycreeper is under serious threat from both natural predators and man. Tree rats are its primary natural predator. But man's destruction of the honeycreeper's habitat is a threat of even greater significance. The habitat of the large amakihi honeyeater has been cleared for sugar cane.

Because many parts of the Hawaiian islands are inaccessible, it is difficult to assess the decline in honeycreeper numbers.



Top: *A young amakihi has dull plumage that will later become yellow.*

Above: *The amakihi is a seed-eating honeycreeper and therefore has a shorter bill.*

COMMON BUZZARD

CARD 71



GROUP 2: BIRDS

ORDER
Falconiformes

FAMILY
Accipitridae

GENUS & SPECIES
Buteo buteo



The common buzzard is one of the most abundant birds of prey in Europe and northern Asia. It can adapt readily to changing habitats and different food sources.

KEY FACTS



SIZES

Length: Almost 2 ft.
Wingspan: 3½-4 ft.
Weight: 1-3 lb.



BREEDING

Sexual maturity: Usually 2 years.
Breeding season: Late March to early July.
No. of broods: 1.
Eggs: 2-4, white or white with brown blotches.
Incubation: 4½ to 5½ weeks.
Fledging period: 7-8 weeks.



LIFESTYLE

Habit: Solitary or paired. Typically hunts alone.
Diet: Small mammals, birds, reptiles, amphibians, large insects, and earthworms.
Lifespan: Usually 6-8 years.



RELATED SPECIES

There are 24 species of buzzard in the genus *Buteo*.



■ Resident. ■ Winter only. ■ Summer only.

DISTRIBUTION

Much of Europe and northern Asia, from Portugal east to Russia, Asia Minor, and a narrow belt of land from Siberia to Japan. Also Atlantic islands off West Africa.

CONSERVATION

The buzzard suffered when rabbits, its main prey, were killed by a viral disease called myxomatosis. Although the buzzard has recovered, its numbers are declining in some areas.

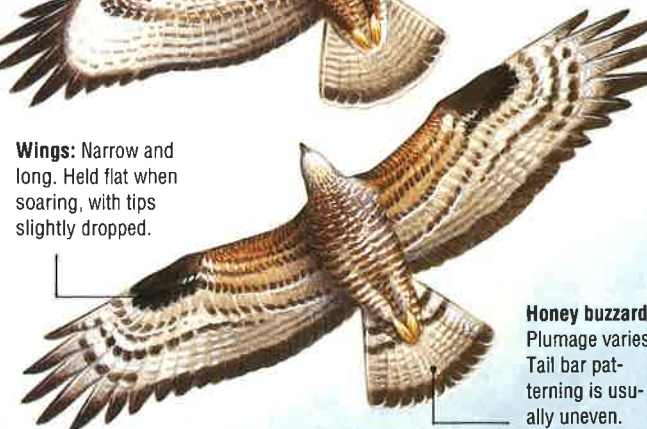
A COMPARISON WITH THE HONEY BUZZARD

Common buzzard: Plumage ranges from mostly pale to very dark or any tone between these two extremes.



Wings: Held in a very shallow V with raised tips.

Wings: Narrow and long. Held flat when soaring, with tips slightly dropped.



Honey buzzard: Plumage varies. Tail bar patterning is usually uneven.



Common buzzard: Heavy and rounded head with brown plumage. Strong black-and-yellow bill.



Honey buzzard: Lean, protruding head with gray plumage. Weak-looking gray-and-yellow bill.

The common buzzard likes to hunt over open country, although it breeds in woodlands.

It uses diverse methods to catch a variety of prey, from rabbits to insects. In flight it resembles the much larger golden eagle.



HABITS

The common buzzard glides and soars with ease. It spends hours circling above in search of prey. Its flight also serves to announce its ownership of a particular territory.

When soaring, the bird's wings bow upward in a shallow V shape. The primary (wingtip) feathers are held wide apart like large fingers, and the tail is broadly fanned, which helps provide maximum lift in rising air currents. The best time for the buzzard to soar is at midday during spring and summer, when the updraft is strongest.

When it glides, the common buzzard holds its wings flat or slightly upturned and directs their tips backward. Between glides and on take-off, it usually beats its wings shallowly and stiffly.

FOOD & FEEDING

Although it looks like a small eagle, the common buzzard rarely kills large prey. Instead, it feeds mainly on small mammals such as rabbits, rats, voles, and mice. But the buzzard adapts readily to whatever prey is available. It also preys on young or weak birds, lizards, snakes, frogs, big insects, and earthworms, and it feeds on *carrion*, or the flesh of dead animals.

The common buzzard uses a range of hunting styles. It soars or glides over large areas searching for the slightest movement that betrays the presence of prey below. By flying into an updraft, the buzzard can hover, gently fanning its wings to remain almost motionless. It also searches the ground methodically by flying repeatedly



over the same patch of land. A common tactic is for the buzzard to perch on a rock or post for a while until it sights prey. It then drops down with half-closed wings to seize its

BREEDING

The buzzard's territory varies from about a quarter to a half a square mile. The male defends this area in early spring before the eggs are laid, in early fall when chicks are in the nest, and in late fall after the young have become independent.

Buzzards generally mate for life. Courtship involves a dramatic display. The pair soar around each other in tight circles giving a loud, ringing call. The male may carry a branch or prey in his talons.

Left: The common buzzard's eyesight is about eight times keener than a human's.

After mating, the pair builds a nest, usually high in a tree but sometimes on a cliff. Up to three feet across, the nest is made of large sticks, twigs, and other available materials and lined with green foliage. The pair may build a new nest each year or reuse the same one.

The female carries out most of the incubation and then cares for her downy white chicks almost continuously until they are two weeks old. During this time the male brings food. The female eats some and tears up the rest for her noisy young.

Soon both parents must hunt to satisfy the large appetites of the chicks. Until they are about four weeks old, the young cannot tear up food for themselves.

A chick makes its first flight at age seven to eight weeks

but remains with its parents for another six to eight weeks learning to hunt. The young buzzard is nomadic until it establishes its own territory.

Below: Young chicks are fed regularly by both parents and stay with them for four months.



DID YOU KNOW?

- Many people on vacation in Scotland think they have seen a golden eagle when they spot a common buzzard. Amused locals have coined the name "tourist's eagle" for the common buzzard.
- When contesting prey with a rival, the buzzard may use a variety of displays to avoid a potentially fatal fight. It may assume the "angel" posture of a bird defending a carcass, with its wings spread behind its back. Or it may adopt a

- submissive pose—lying motionless on one side with a wing raised in defeat.
- A buzzard's territory extends vertically as high as 800 feet above ground. Below this height, intruders are attacked or chased away, but above it birds may soar unharmed.
- The American bird of prey *Cathartes aura* is sometimes called the turkey buzzard. But it is not related to the common buzzard. Its correct name is the turkey vulture.

Above: A dark rabbit against a snowy field is an easy target.

victim. The buzzard may also walk on the ground looking for earthworms or insects.