

down feathers

down feathers

These are the fluffy
under-feathers for
insulation (the bird's
underwear).

contour feathers

countour feathers

Strong outer feathers are
used for flight. These
are also the bird's
clothes and coloration.

hollow bones

hollow bones

These help a bird keep
its weight low so it can
fly.

air sacs

air sacs

A lot of oxygen is needed to give birds energy to fly. Air sacs extend from the lungs, between and into hollow bones. They help maximize the absorption of oxygen.

long, pointed wings

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To fly fast and far,
having long pointed
wings is helpful.

camouflage plumage

camouflage plumage

Camouflage, or cryptic coloration, helps birds to be less visible because they blend in with their background.

long toes

long toes

Shorebirds need long
toes for stability and for
walking on the mud.

long legs

long legs

Long legs help
shorebirds wade
through the mud and
water to find food.

Bill

Bill

Bills or beaks are used for picking up food, nest construction, courtship preening and defense.

oil gland

oil gland

The oil gland, found near the base of the tail, helps keep a shorebirds' feathers waterproof.

guano

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Shorebird scat, or guano, contributes to the chain of life. Nutrients from guano are returned to the wetlands and are used by tiny plants.

habitat destruction

habitat destruction

Changing or developing wetland habitats can destroy animals and plants which provide food and shelter for shorebirds.

oil contamination

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Oil spills can kill
shorebirds and destroy
habitats for many years.

disturbance

disturbance

Planes, boats, and people
approaching can disturb
shorebirds while they are
feeding or on their nests.

trash

trash

Trash can be mistaken for food by birds and can kill them. Shorebirds can get caught in fishing line, 6-pack rings and old fish netting