

Observing Birds

The bills of birds are adapted for getting different foods. They also help the birds build nests, preen their feathers, and for protection.

ADAPTATIONS OF BILLS



SEED EATING. (a) Short thick bill for crushing seeds. Examples: sparrow, grosbeak, bunting finch. (b) Upper and lower mandibles crossed to enable bird to extract seed from cones of evergreen trees. Example: crossbill.



INSECT EATING. (a) Slender, pointed beak for picking up insects. Examples: warbler, vireo. (b) Very wide mouth for catching insects on the wing. Examples: swallow, nighthawk, swift.



PROBING. (a) Long slender bill for probing in mud in search of food. Examples: snipe, woodcock, other sandpipers. (b) Long slender bill for probing the necks of flowers to feed on nectar. Example: hummingbird.



PREYING. (a) Strong, sharp, hooked bill for tearing flesh of prey. Examples: owl, hawk, falcon.



STRAINING. Broad, flattened bill for straining food from mud. Examples: flamingo, duck, goose.



GROUND FEEDING. Short, stout bill for feeding on the ground. Example: bobwhite.



FISH EATING. (a) Long and sharp for spearing fish. Example: heron.



FISH EATING. (b) With a flexible pouch underneath for holding captured fish. Example: pelican.

The birds' feet are built for perching, scratching, walking, swimming, and seizing prey.

ADAPTATIONS OF FEET



PERCHING. Three toes in front, one behind. Most familiar birds are of this type. The foot automatically clasps the perch when the leg is relaxed. Examples: sparrow, chickadee, robin.



WADING. Long legs, long slender toes. The three long toes keep bird from sinking into the mud. Examples: gallinule, heron, sandpiper.



SCRATCHING. Claws strong and blunt for raking or scratching the ground for food. Examples: pheasant, quail, grouse.



SWIMMING. Three front toes fully webbed. Examples: goose, gull, duck.



CLIMBING. Two toes in front, two toes in back, sharp claws for clinging to an upright surface with ease. Example: woodpecker.



PREYING. Powerful feet and legs with strong, curved sharp talons for grasping prey. Examples: hawk, owl, eagle.

Birds' wings size and shape vary greatly. Some wings are designed for soaring, for sudden turns and rapid flight, or for easy long-distance travel.

ADAPTATIONS OF WINGS



Long, broad wings for strong, soaring, effortless flight. Examples: hawk, eagle.



Long, pointed wings for fast, easy flight in the pursuit of flying insects. Examples: swallow, swift, hummingbird.



Short, rounded wings for speedy, take-off and fast flight over comparatively short distances. Examples: pheasant, woodcock, grouse.

Tails help the birds balance when they are perching and are rudders when they are flying.

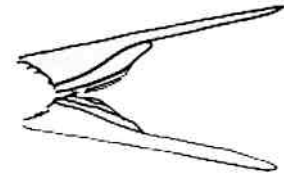
ADAPTATIONS OF TAILS



Tall feathers with strong spine-like tips for use as a prop or support when clinging to vertical surfaces. Examples: woodpecker, swift, brown creeper.



Broad fanned tail for soaring. Example: buteo-type hawk.



Long, forked tail for graceful skimming flight and extreme maneuverability. Examples: tern, barn swallow, trigate bird.