

The Little Owl

Population dynamics, Behavior and Management of *Athene noctua*

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Glossary

The terms found in this glossary relating to the body characteristics of birds are from the US Geological Service web site:

<http://www.mbr-wrc.usgs.gov/id/fram1st/Glossary/glossary.html>.

Other terms were derived from a variety of other sources.

We draw on the definitions provided by Steenhof (1987) for descriptions of some of the demographic terms below.

The different parts of the owl are first given. The foot consists of toes with claws and the tarsus or tarso-metatarsus. The expression 'foot' is used when no specific part of it is referred to. Owls have four toes, three in front and one hind-toe. Of the front toes the outer one may be turned backwards (as the owls often do when they are roosting).

The primaries are counted from the middle of the wing outwards to the tip and the secondaries from the middle of the wing inward to the body. When the wing length is measured, the wing has to be closed and the distance taken from the wrist or bend to the longest primary feather. The tail length is the distance from the base of the central tail feather to the tip. Tail feathers are counted from the center outwards. Each feather has a shaft and an outer and inner web.

[abdomen](#)

Ventral part of the bird. Synonym(s): belly. In picture it is referred to as *belly*.

[alula](#)

Three feathers springing from the base of the primaries. Synonym(s): alular quills.

[alular quill coverts](#)

Feathers overlying the bases of alula. No picture yet.

[alular quills](#)



Three feathers springing from the base of the primaries. Synonym(s): alula. In picture it is referred to as *alula*.

anthelmintics

Quinoline-derived, organophosphorous compound drugs used to kill parasites, including roundworms, whipworms, hookworms, pinworms, trichinella (trichinosis), and other less common organisms. Also indexed as: Albendazole, Albenza®, Antiminth®, Biltricide®, Diethylcarbamazine, Hetrazan®, Ivermectin, Mebendazole, Mintezol®, Oxamniquine, Pin-Rid®, Praziquantel, Pyrantel, Stromectol®, Thiabendazole, Vansil®, Vermox®.

auricular

Area around ear opening. Synonym(s): ear patch.

axillary

Ventral area between the body and the wing. Synonym(s): wingpit.

back

Dorsal part of the bird.

belly

Ventral part of the bird. Synonym(s): abdomen.

bill

Beak.

body

Main mass of the bird as distinguished from its appendages.

breast

Front part of the chest.

breast band

Stripe across the breast.

breast spot



Small, differently colored area on the breast.

[breeding pair](#)

A pair of owls that lay at least 1 egg. A breeding attempt is confirmed by observing an incubating adult, eggs, young, or any field sign that indicated eggs were laid.

[brood size](#)

Number of nestlings per nest that survive after hatching for a specified period (e.g., to feeding stage).

[cap](#)

Top of the crown.

[census](#)

The complete count of every individual in a given population (very rarely possible in wild populations).

[cere](#)

Fleshy area between the beak and face.

[cheek](#)

Area bounded by lore, eye, auricular, and lower mandible.

[chest](#)

Front part of the body.

[chin](#)

Part of the face below the bill.

[clutch size](#)

Number of eggs in a nest immediately following the laying of the last egg during a particular reproductive cycle.

[collar](#)

Rear portion of crown. Synonym(s): nape, hindneck. In picture it is referred to as *hindneck*.



comb

Colored area over eye found in males.

commissure

Base of the bill where the mandibles join. Synonym(s): gape, rictus. In picture it is referred to as *gape*.

crest

Tuft on the head.

crissum

Feathers covering underside of base of tail. Synonym(s): undertail coverts. In picture it is referred to as *undertail coverts*.

crown

Top of the head.

culmen

Upper ridge on bill.

detection rate

A summary of the number of owls that were located across a given area, e.g., (number of individuals heard)/(number of playback sessions performed) (Galeotti 1989, Sará & Zanca 1989, Centili 2001). Detection rates are rather low, as observers cannot separate owl absence from owl silence and surveys conducted in areas of unsuitable habitat (no owls present to respond) are incorporated into the summary. The calculated detection rate is inversely proportional to the number of playback stations surveyed with no owls responding.

dihedral

Wings of a flying bird held at an angle appearing to form a "V". No picture yet.

dispersal

The term that applies to a young owl as it leaves its natal territory to mature and search out and settle into a territory of its own.



Breeding Dispersal (demographic context): reflects the shifts that adults owls make, for example, a female may breed in one location one year, and may move to a different territory for the next breeding season.

Successful dispersal: an owl is one who moves from his/her natal territory, disperses, and lives long enough to become part of a mated pair.

[ear patch](#)

Area around ear opening. Synonym(s): auricular. In picture it is referred to as *auricular*.

[ears](#)

Rounded, earlike areas on the face. Synonym(s): facial discs. In picture it is referred to as *facial discs*.

[ecoregion](#)

A relatively large unit of land or water containing a characteristic set of natural communities that share a large majority of their species, dynamics, and environmental conditions.

[eye](#)

Organ of sight.

[eye line](#)

Line of feathers in front of and behind the eye.

[eye ring](#)

Pale-colored feathers encircling the eye.

[eyebrow](#)

Line of feathers above the eye. Synonym(s): supercilium, superciliary line. In picture it is referred to as *supercilium*.

[eyelid](#)

Skin-fold covering the eye. No picture yet.

[face](#)

Front part of the head.

[facial discs](#)

Rounded, earlike areas on the face. Synonym(s): ears.



[feet](#)

Terminal part of the leg.

[flank](#)

Area between the belly and the wings, more posterior.

[flank stripe](#)

Band on the flanks.

[fledging rate](#)

Number of young that fledge the nest divided by the brood size.

[flight feathers](#)

Primaries and secondaries.

[floater](#)

A non-territorial owl, who discretely exists within the population. In territorial owls, adults (typically the male) vocalise to affirm their territorial boundaries. Meanwhile floaters remain silent (or mostly silent), not wanting to be found as they are often aggressively chased by the territory holder, who views the floater as a potential competitor for the available resources (food or mate). The function of a floater is to quickly fill territories as they become vacant through the death or movement of the previous territory holder. *For Little Owls, we urge future research conducted in high density areas to examine the context of floaters, as anecdotal observations to date suggest that 'floater' owls may, in fact, be more vocal and aggressive rather than being discrete.*

[forehead](#)

Part of the face above the eyes.

[foreneck](#)

Front part of the neck. Synonym(s): throat, jugulum, throat patch.

[frontal shield](#)

Extension of the bill onto the forehead.

[fruit tree crops:](#)



Actively managed, low-stem orchard (fruit trees of low height). These fruit trees are planted very closely in rows to allow easy treatment with chemicals and other recurring management activities.

[gape](#)

Base of the bill where the mandibles join. Synonym(s): commissure, rictus.

[gonys](#)

Lowermost ridge on lower mandible.

[greater secondary coverts](#)

Feathers overlying bases of secondaries.

[gular region](#)

Between the chin and the foreneck.

[hatching rate \(or hatching success, or hatch rate\)](#)

Number of eggs per nest that successfully hatch into live young divided by the clutch size.

[head](#)

Upper part of the body.

[head stripes](#)

Bold lines on the head.

[hindhead](#)

Rear portion of crown. Synonym(s): occiput.

[hindneck](#)

Back of the neck. Synonym(s): nape, collar.

[home range](#)

The area that embraces all activities of a bird or pair over a given time period. For owls this is often expressed over the time period of one year.

[horns](#)

Paired contour feathers arising from head.

[inner primaries](#)



Group of primaries closest to the body.

[inner secondaries](#)

Group of secondaries closest to the body.

[inner wing](#)

Shoulder, secondaries and secondary coverts.

[iris](#)

Colored part of eye.

[jugulum](#)

Front part of the neck. Synonym(s): foreneck, throat, throat patch. In picture it is referred to as *foreneck*.

[knee](#)

Joint in the middle part of the leg.

[leading edge of wing](#)

Front edge of the wing in flight.

[leg](#)

Limb used for supporting the bird.

[lesser secondary coverts](#)

Feathers overlying bases of median secondary coverts. Synonym(s): marginal coverts, shoulder.

[leucistic](#)

Plumage aberration of genetic origin, typically of faded or washed-out colouration; not to be confused with albinism.

[lore](#)

Area between the eye and the bill.

[lower mandible](#)

Lower part of the bill.



[lower mandibular tomia](#)

Cutting edges of lower mandible.

[malar streak](#)

Area at the sides of the chin. Synonym(s): whisker, moustache. In picture it is referred to as *whisker*.

[mandibular ramus](#)

Prong-like, posterior projection from bill. No picture yet.

[mantle](#)

Upper surface of the wings and the back.

[marginal coverts](#)

Feathers overlying bases of median secondary coverts. Synonym(s): lesser secondary coverts, shoulder. In picture it is referred to as *lesser secondary coverts*.

[median line](#)

Stripe through the crown.

[median secondary coverts](#)

Feathers overlying bases of greater secondary coverts.

[metapopulation](#)

A spatial distribution of distinct subpopulations, separated by large distances or barriers and connected by dispersal movements.

[moustache](#)

Area at the sides of the chin. Synonym(s): whisker, malar streak. In picture it is referred to as *whisker*.

[mouth](#)

Cavity bounded by the bill. No picture yet.

[nape](#)

Back of the neck. Synonym(s): hindneck, collar. In picture it is referred to as *hindneck*.

[nasal canthus](#)



Anterior corner of eye. No picture yet.

[nasal fossa](#)

Depression in which nostril is located.

[neck](#)

Part connecting the head to the main part of the body.

[neck patch](#)

Inflatable sac on neck used by males in courtship display.

[nest disturbance](#)

A nest disturbance is considered to be any occasion when a nest was entered or when adult owls react to the presence of researchers or other human activity in the vicinity of a nest.

[nest site](#)

definition of nest site.

[nictitating membrane](#)

Translucent, vertical fold under the eye lid. No picture yet.

[nostril](#)

External naris.

[occiput](#)

Rear portion of crown. Synonym(s): hindhead. In picture it is referred to as *hindhead*.

[operculum](#)

Swollen structure in pigeons overarching the nostril.

[outer primaries](#)

Group of primaries farthest from the body.

[outer secondaries](#)



Group of secondaries farthest from the body.

[outer tail feathers](#)

Part of the tail farthest from the center.

[outer wing](#)

Alula and primaries.

[patagial mark](#)

Dark patch on leading edge of underside of inner wing.

[pelagic](#)

Living on the open ocean rather than coastal or inland bodies of water

[pileum](#)

Top of the head extending from the base of the bill to the nape

[pinnae](#)

Projecting feathers.

[plumes](#)

Large, conspicuous, showy, feathers.

[post fledging check](#)

Inspection of nest box and surroundings after the young have reached more than 30 days.

[primaries](#)

Flight feathers attached to the "hand".

[primary coverts](#)

Feathers protecting and covering the primaries.

[primary numbering](#)

System for assigning a number to each primary.

[pupil](#)

Contractile aperture in iris.



[rectrices](#)

Conspicuous feathers forming posterior margin of tail.

[remiges](#)

See primaries and secondaries.

[response rate](#)

Used in the context of survey techniques, the response rate of live, wild owls to the broadcasted calls of their own species. Response rate reflects the proportion of owls that, when within hearing range of the broadcasted playback calls, actually respond to the playback. For example, if 5 out of 10 owls that were within the broadcast range of playback recordings actually responded to the playback, this is a response rate of 50%. However, unless the owls' locations are first determined with radio-telemetry, observers employing playback have no way of knowing whether surveys without responses reflect the absence of owls, whether the territory holders were outside of hearing range, or whether owls were present and did not reply.

[rictal bristles](#)

Stiffened feathers near bill.

[rictus](#)

Base of the bill where the mandibles join. Synonym(s): gape, commissure. In picture it is referred to as *gape*.

[ringing age of young](#)

The age of young when their legs are formed and of sufficient strength and size to hold a ring, typically about 3 weeks of age. Ringing is typically conducted about one week before the young 'jump' from the nest. Young that have achieved ringing age does not imply that they have successfully fledged.

[ruffs](#)

Fringe of feathers growing on the neck.

[rump](#)

Area between the uppertail coverts and the back.

[scapulars](#)

Area of feathers between the back and the wings.



[secondaries](#)

Flight feathers attached to the "elbow".

[secondary coverts](#)

Feathers protecting and covering the secondaries.

[survey](#)

An estimate of the number of animals in a given area (e.g., number of territorial pairs) or of the relative frequency of encounters of animals (e.g., number per unit transect length or time period). Repeated surveys can be used to estimate the trend of a population. Surveys provide an efficient way of collecting information from a large number of sites and can also help determine the overall distributional range of a species in different seasons. The structure of surveys is intended to reduce observer bias, and surveys are best conducted in a standardised way to ensure reliability and validity.

[shoulder](#)

Feathers overlying bases of median secondary coverts. Synonym(s): lesser secondary coverts, marginal coverts. In picture it is referred to as *lesser secondary coverts*.

[side](#)

Area between the belly and the wing.

[side of neck](#)

Area of neck between foreneck and hindneck.

[spectacle](#)

Eye ring and supraloral line together.

[speculum](#)

Highly colored area on secondaries of several ducks.

[suborbital ring](#)

Eyelids. No picture yet.

[subterminal band](#)

Stripe before tip of tail. No picture yet.

[successful brood](#) (also Successful Breeding Attempt)



A pair of owls having 1 or more young that successfully fledge.

[superciliary line](#)

Line of feathers above the eye. Synonym(s): supercilium, eyebrow. In picture it is referred to as *supercilium*.

[supercilium](#)

Line of feathers above the eye. Synonym(s): eyebrow, superciliary line.

[supraloral line](#)

Line of feathers above the lore.

[tail](#)

Feathers extending from the rear of the bird.

[tail coverts](#)

Under and uppertail coverts.

[tail numbering](#)

System for assigning a number to each tail feather.

[tape playback](#)

Survey method using broadcasting of Little Owl call to provoke reaction of birds present.

[tarsus](#)

Part of the leg between the knee and the foot.

[temporal canthus](#)

Posterior corner of eye. No picture yet.

[terminal band](#)

Stripe at tip of tail.

[territory](#)

The area around the nest that is defended (Newton 1979).

[tertiaries](#)



Feathers adjoining the secondaries.

[throat](#)

Front part of the neck. Synonym(s): foreneck, jugulum, throat patch. In picture it is referred to as *foreneck*.

[throat patch](#)

Front part of the neck. Synonym(s): foreneck, throat, jugulum. In picture it is referred to as *foreneck*.

[tibia](#)

Part of the leg above the knee.

[toe](#)

Digit attached to the feet.

[trailing edge of wing](#)

Rear edge of the wing in flight.

[underparts](#)

Belly, undertail coverts, chest, flanks, and foreneck.

[undertail coverts](#)

Feathers covering underside of base of tail. Synonym(s): crissum.

[underwing](#)

Underside of wing.

[unsolicited calling](#)

Spontaneous calling of Little Owl without stimulation by tape playback.

[upper mandible](#)

Upper part of the bill.

[upper mandibular tomia](#)

Cutting edges of upper mandible.

[upperparts](#)

Back, rump, hindneck, wings, and crown.



[uppertail coverts](#)

Feathers covering upperside of base of tail.

[upperwing](#)

Upperside of wing.

[whisker](#)

Area at the sides of the chin. Synonym(s): moustache, malar streak.

[wing](#)

Moveable feathered appendage.

[wing bars](#)

Pale tips of greater and median secondary coverts.

[wing coverts](#)

Primary and secondary coverts.

[wing lining](#)

Median, lesser and marginal coverts on underwing.

[wing stripe](#)

Paler area at base of flight feathers.

[wingpit](#)

Ventral area between the body and the wing. Synonym(s): axillary. In picture it is referred to as *axillary*.

[wrist](#)

Area at base of the primaries.