

► Like many waders, the plumage of juvenile Knots is sufficiently different from adults to be recognisable in the field...once they've settled down!



FIELD CRAFT

How to calculate age and sex ratios of flocks

Training Manager, Nick Moran, sets out the skills you need to separate birds of the same species in flocks and demonstrates the value in doing so.

Determining the age and sex of a bird might seem like a skill reserved for ringers or 'elite' birdwatchers. However, this can be an important stepping stone towards making a positive identification, helping you to avoid certain ID pitfalls on the way. Better still, the basics are not as tough to master as they might seem!

Furthermore, collecting information on age ratios of flocks of birds can provide important demographic data. For example, many of the waders that visit the UK in winter and are counted in the Wetland Bird Survey (WeBS) breed

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in the high Arctic, where it is difficult to monitor breeding success. Counting the proportion of birds in their first calendar year gives a valuable insight into the outcome of each breeding season – in a good year, a much higher percentage of juveniles would be expected than after a poor breeding season.

Recording sex ratios gives useful information about the population structure, as well as a better understanding of inter-annual variation. This can help us to establish the difference between long-term trends and fluctuations between years. We know that there are considerable differences in overall sex ratios in many wintering duck flocks, and that a greater proportion of males of many species are found in the north of the flyway. Collecting sex ratio data can also provide a useful basis for investigating sex differences in survival.

AGEING WADERS

We gave some pointers for working out the age of various types of bird in *BTO News* 331's Field Craft feature. Many of the newly grown upperpart feathers of waders, along with those of many other birds, have pale fringes. These areas lack melanin, a dark pigment which makes

ADULT DUNLIN



JUVENILE DUNLIN



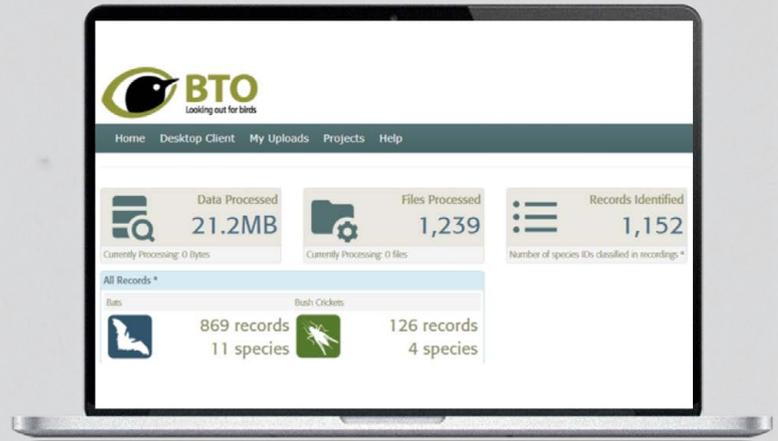
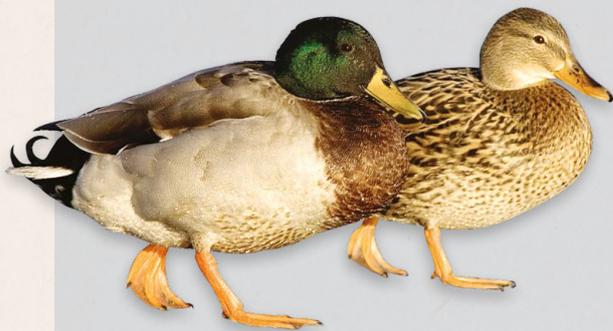
▲ Look out for the pale-fringed wing feathers on juvenile waders.

New WeBS online tool

In January 2020, WeBS launched a new feature in the online data entry to allow counters to optionally record the number of birds of different ages and sexes for certain wildfowl and wader species. This might be all the birds of a particular species present, or a sample of a larger flock. Sample wader age data from flocks can be input as additional information with a WeBS Core Count, Low Tide Count or Casual Count, or summary data can be added to BirdTrack. For those willing and able to take part, there's a detailed guidance document on the website: bit.ly/WeBSAgeSex

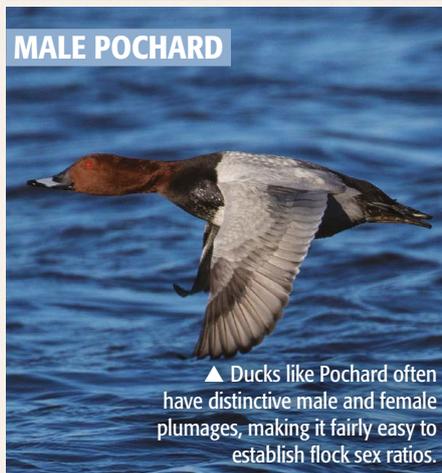
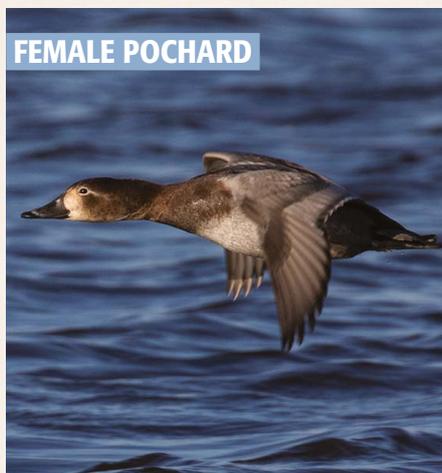
The very first National Wildfowl Counts forms from the 1940s used to optionally record age and sex ratio data, so this is a return to collecting this information after a very long hiatus! The data gathered will be invaluable for future analyses of breeding success by looking at age composition across years, and for tracking changes in migratory behaviour by recording the ratio of male to female birds.

▼ WeBS volunteers can now record information on age and sex ratio for the first time in more than 70 years.



Collecting sex ratio data can also provide a useful basis for investigating differences in survival between the sexes

any parts of the feather that contain it more durable (*Masterclass, BTO News 330*). Adult waders typically moult during winter, with the weaker pale tips then wearing off as spring progresses to reveal the often richly coloured and patterned breeding plumage beneath. By late summer though, these feathers are several months old, have long since lost all their pale tips and are usually starting to dull. At the same time of year, juvenile waders are looking their best, having recently grown their first set of pale-tipped feathers. In many species, these create a neat, scalloped or scaly appearance, quite different from the adults, making this the best time to assess age ratios in flocks. Most juvenile waders begin their moult in September or October but some pale-tipped juvenile feathers will often be retained further into the autumn/winter, allowing the age of



▲ Ducks like Pochard often have distinctive male and female plumages, making it fairly easy to establish flock sex ratios.

such individuals to be determined as late as midwinter, with good views.

SEXING DUCKS

As autumn progresses it becomes easier to distinguish male from female ducks, for most species, because males attain their distinctive breeding plumage. This makes it a good time to gather information about the sex ratios of flocks of ducks. The easiest way to do this is to scan through the flock counting all the males, then repeat the process for the females. Note that males in their first year can resemble females, so keep this in mind as you count the females. The presence of a predator or other perceived threat can encourage dabbling ducks to move out of vegetation onto open areas of water, whilst diving ducks will often remain on the surface until the danger has passed. When counting ducks, be ready to take advantage of any such disturbance as it can make the task much easier – as long as the birds are not flushed. ■

Find out more

For details of training courses and tips on bird identification, including videos, please visit:

www.bto.org/develop-skills

Take part in WeBS: www.bto.org/webs