

Common swift factsheet

Name: Common swift (Dutch: gierzwaluw)
Latin: *Apus apus*
Order: Apodiformes
Weight: 43 grams
Span: 42 cm
Length: 18 cm
Wing surface: 130 cm² (wings fully extended)

Dimensions and weight are averages for male common swifts.



A common swift in flight.

Source: Ran Schols, www.pbase.com/ranschols/swift

Flight

Swifts can stay in the air without landing for a very long time. Swifts are known to fly non-stop for over a whole year, and perform almost all of their vital behaviour on the wing, including eating, mating, and even sleeping. Being dependent on its flying skills for survival and success in terms of feeding and reproduction, swifts have developed into acrobatic flyers and hungry insect-eaters that go through the sky like a vacuum cleaner. The swift is equipped with a wide beak to catch its prey, and eats up to 20.000 insects per day.

Wing build-up

The wing of a common swift can be divided into arm and hand wing. In the common swift, the hand wing's surface is several times larger than the arm wing. Less aerial species of bird have lower surface ratios. The swift's arm wing has 7 flight feathers, and the hand wing has 11 flight feathers.

Morphing the wing

Underneath its wing feathers, the common swift has muscles, tendons, and joints that allow it to adjust several parameters of the wing geometry. These include the wing sweep, the wing surface, the local airfoil camber (curvature of a wing cross-section), and the aspect ratio (wing slenderness).



The beak of the common swift is used to catch insects in flight.



In-flight mating Source: Graham Catley, www.nyctea.co.uk

References:

ANWB Vogelgids, ANWB Uitgeverij Boeken, 2005
John J. Videler, Avian Flight, Oxford University Press, 2005.