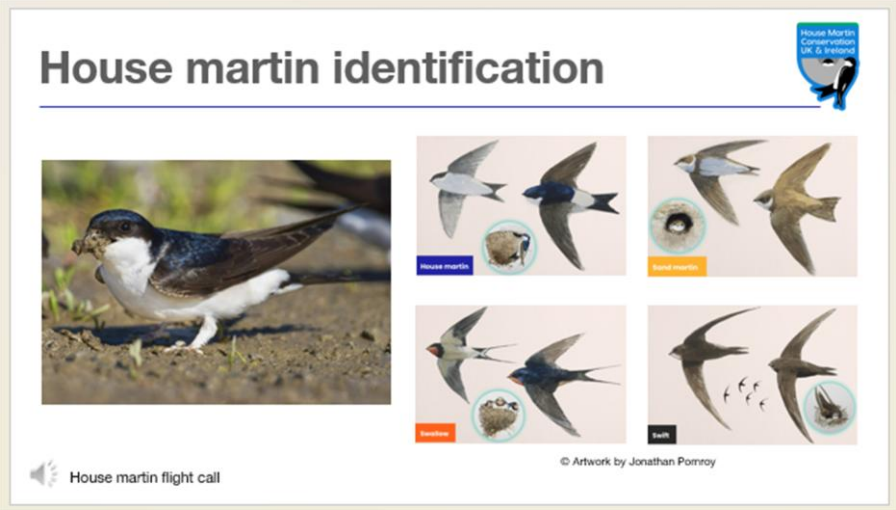
Assembly/Discovery Pack Notes – Secondary Schools

These notes accompany the assembly pack. They are provided to talk through the slide, give further details into the lives of house martins and the issue affecting them, and give context for the person delivering the presentation. You can either read the notes out in full at your assembly/group session, or adapt the notes to suit the audience and the time available.

Where an action is required to click a button on a slide these are highlighted by the word "Action:" and in bold blue text.

Slide 2



House martins return to the UK each Spring to breed, they return to the same nest site each year. House martins often get confused with other migratory birds that also return to the UK in Spring to breed, such as sand martins, swallows, and common swifts. All these birds visit water sources to feed and drink and can often be seen flying together over large ponds and lakes.

These images show the differences between the birds. House martins have a glossy blue-black sheen to their heads and upper back, are all white underneath with a dark tail. They are small birds, with a body length of 13-14 cm, and a wingspan of 26-29 cm.

Sand martins are similar sized, but browner in colour with a brown collar around their necks.

Adult **swallows** have long tail steamers, a black neck collar and red chin and face, and dark underwings.

Swifts are larger in size, appear all black in flight and have long crescent wings.

Action: Click on the speaker icon to play house martin flight call

Contact us

Get in touch: contact@housemartinconservation.com

House Martin Conservation UK & Ireland @ukhousemartins

www.housemartinconservation.com

Emergency

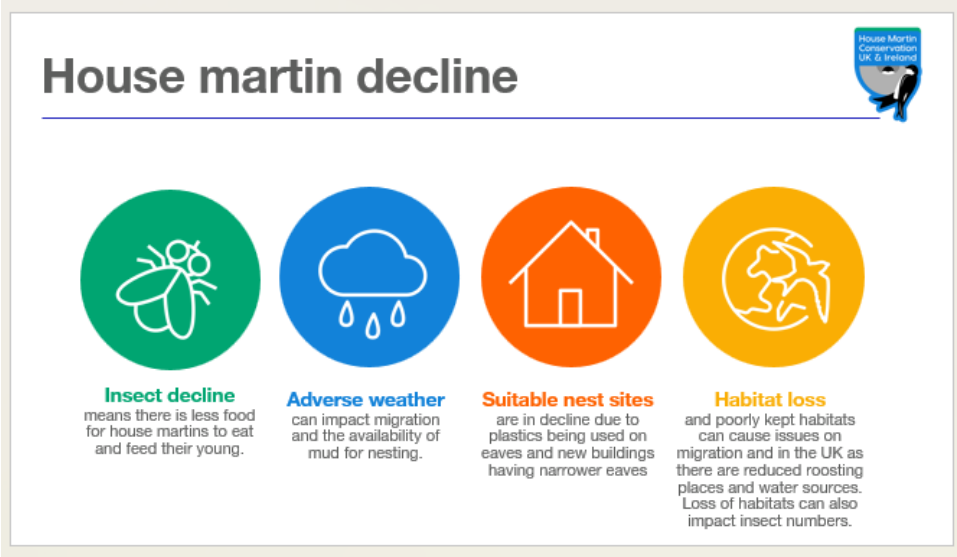
If you have a house martin emergency please contact us or your local wildlife rescue centre.

Slide 3

In December 2021, house martins were added to the red list of British Birds of Conservation Concern because of their decline in the last 50 years. This means that they are at risk of becoming extinct in the UK. If we do not help with conservation efforts to halt their decline, we may lose them from our skies.

House martins do breed in other countries in Europe, and their numbers are declining there too, however at a lesser rate. Across Europe they are on the amber list as a species of European conversation concern.

Slide 4:



Insect decline: Loss of vital habitats such as wildflower meadows, wetlands, woodlands, and hedgerows have had an impact to insect numbers. Pesticides usage on farms, allotments, and gardens kills off insects. Some pesticides use chemicals that are not targeted at a specific insect species considered as pests, and therefore they kill a wide variety of beneficial species too.

Adverse weather: Heavy wind and rain on migration can cause fatigue as the birds battle the weather or fly around storms, this can exhaust birds or lead to fatality. They can also be caught up in heavy storms, which can also lead to bird fatalities.

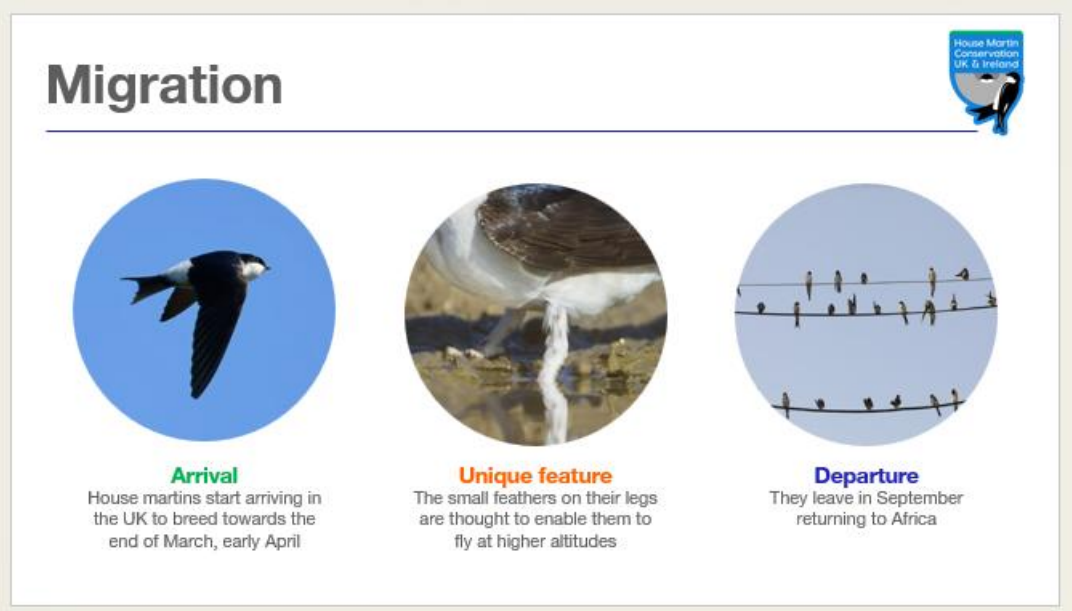
Adverse weather and fatigue can also delay birds returning to their breeding grounds, which can shorten their breeding period. We suspect that some house martins may stay in other European countries when faced with adverse weather rather than make their crossing to their UK breeding grounds.

Late arrival of rain in April/May can also affect the amount of mud available to house martins when they return to nests sites which they need to make nests or repair damaged nests. Drier summers also cause mud patches to dry up preventing repairs to nests, and the heat can cause nests to crack and collapse. Drought can also prevent insects from hatching which can cause an issue along migration routes and whilst they are trying to feed their young in the UK.

Nest site issues: The universal use of plastic soffits in modern housing has become an issue as mud does not stick well to plastic; preventing nests being made, or causing nests to drop. In addition many modern houses whether plastic soffits are used or not have shallow eaves, which do not offer the protection from the weather or predators that house martins need for nesting.

Habitat loss: Loss of habitat that provides insect sources, or loss of water bodies along migration routes which house martins need to regularly stop and refuel, and need to roost overnight, has an impact to their survival on migration, or can cause delays on migration. Climate change has expanded the Sahara desert, making the journey much longer with little food or water on route.

Slide 5



Adult house martins who have bred in previous years (termed established breeders), usually return first at the end of March/early April, first-time breeders appearing a bit later at the end of April/early May.

House Martins can breed at one year old, so will look to pair up and breed in the first year they return.

Young males return to the nest colony where they were born, or nearby to it, whereas young females tend to settle several kilometres away, this helps to ensure that birds pairing up to raise young are from different parents.

Helping house martins to re-establish lost colonies, or creating new colonies is an important task as it provides house martins with opportunities to locate healthy mating bonds.

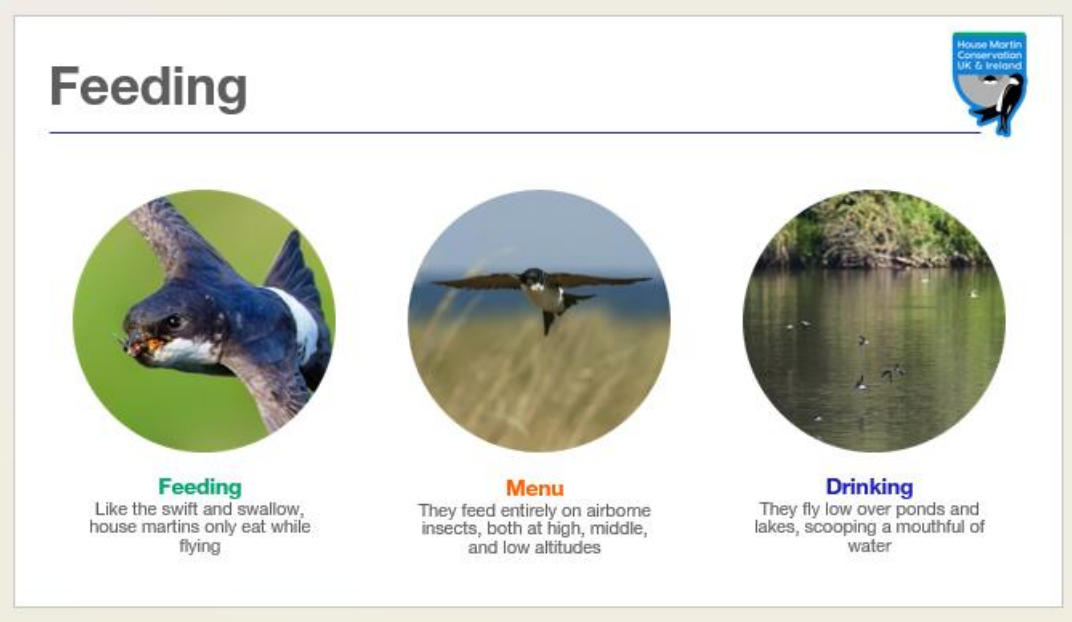
At the end of their breeding season in September, house martins gather in large flocks to prepare for their migration back to Africa where they will spend the winter. At this time they can be seen in great numbers sitting on telephone wires.

House martins are unique in having feathered legs, which the other birds do not have. It is believed this is to help keep their legs warm when migrating at high altitudes.

They return to Africa for the warmer climate where insects exist in greater numbers. House martin winter roosts have been found in Kenya, but more may be present in other African countries.

Some house martins may stop on the Iberian peninsula of southern Europe where there have been reports of overwintering birds.

Slide 6



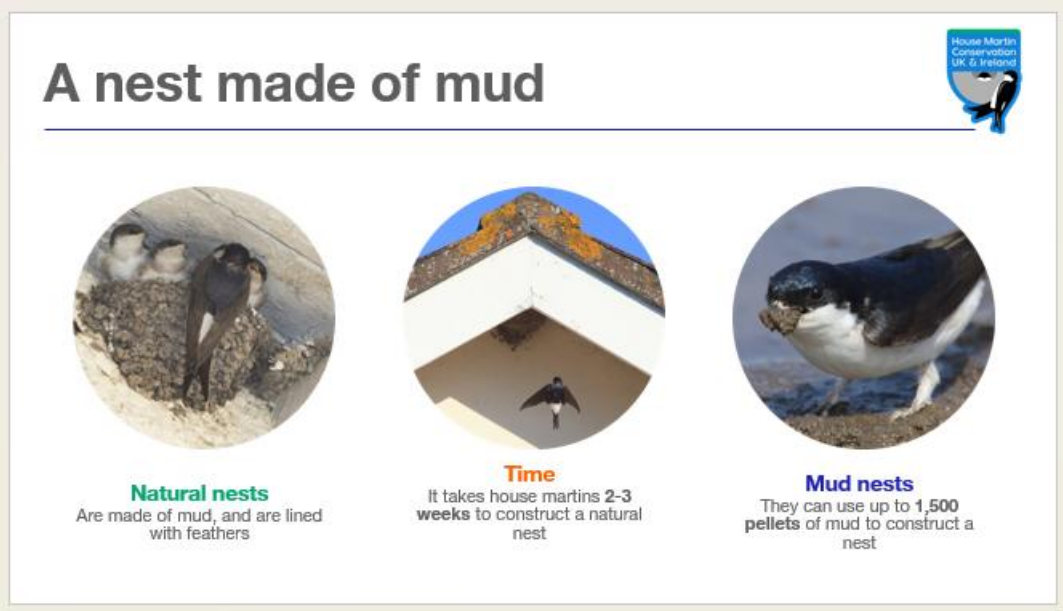
House martin eat airborne insects which they catch whilst flying.

House martins feed at all attitude ranges, high up in the sky beyond our sight, and all the way to low ground. They can often be seen over water sources and livestock fields catching insects .

They eat a range of fly species and a range of beetle species (such as ladybirds), they also eat aphids, mosquitoes, spiders floating in the air, and midges, and other insects they can catch in the air.

They drink from large ponds and lakes, flying low over the water to scoop up a mouthful of water. It's quite spectacular to see.

Slide 7



House martins collect beakfuls of mud to make mud pellets which they use to build their nest.

They can use up to 1500 mud pellets to construct their nest, and build it in 2-3 weeks.

Once built, they line the nest with soft feathers.

Mud is a crucial aspect of house martins' lives.

As well as climate change effecting mud availability, environmental impacts such as draining wetland areas, and filling in ponds reduces mud sources.

Slide 8

House martins used to nest on coastal cliffs - and they still do in places like north-west Scotland and Malham Cove in North Yorkshire, however they have adapted to use buildings.

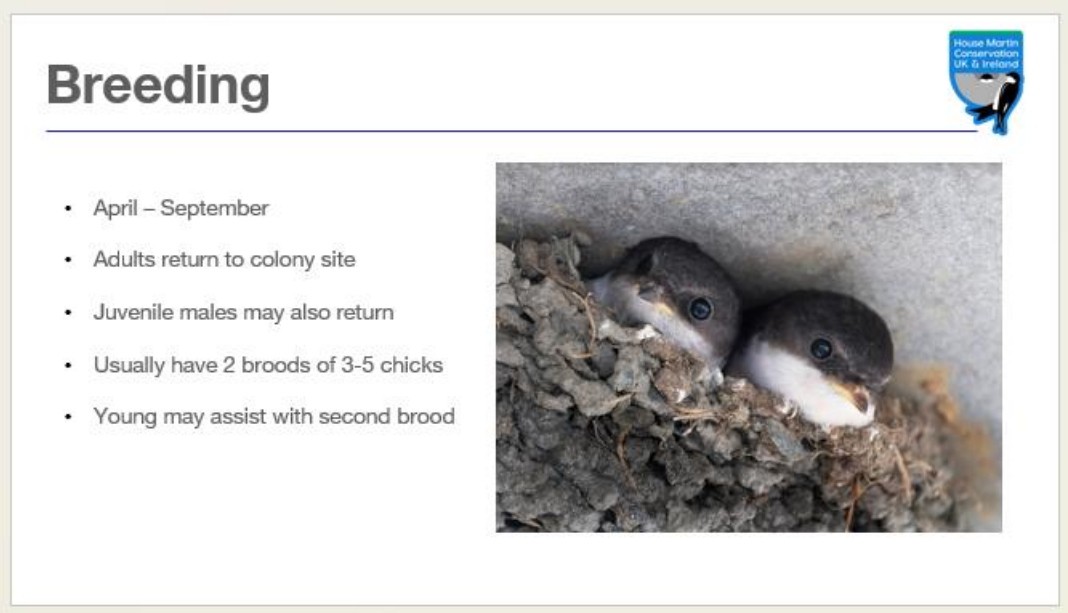
They are social birds and like living near other house martins, creating a nest site colony.

They typically nest under the eaves, or roof overhangs of buildings, at a height of at least two meters, but can be found nesting in window recesses, or other building niches where there is an overhang.

The eaves or overhang needs to be wide enough to protect the nest from weather or predators and must be easily accessible so they can fly in and out of their nests.

They choose locations where there is a mud source nearby, and where nearby habitat provides sources of flying insects, so they tend to nest in rural, or semi-rural locations, or on the outskirts of urban areas where there is the presence of fields, grasslands, woodlands, or wetlands. The presence of livestock nearby also improves the availability of insects.

Slide 9



The breeding season is from April till September, but in years with good late summer weather they may continue into October.

Adults return to their nest colony and pair up; juvenile males may also return to the colony in which they were born.

They usually have 2 broods in the season, laying 3-5 eggs each brood.

White eggs are laid at daily intervals, which is sometimes delayed by bad weather.

Both adults share in incubating the eggs until they hatch, usually around 14-16 days.

The female continues to brood them for a week, as they are born naked – without any soft down or feathers, and unable to maintain their own body temperature.

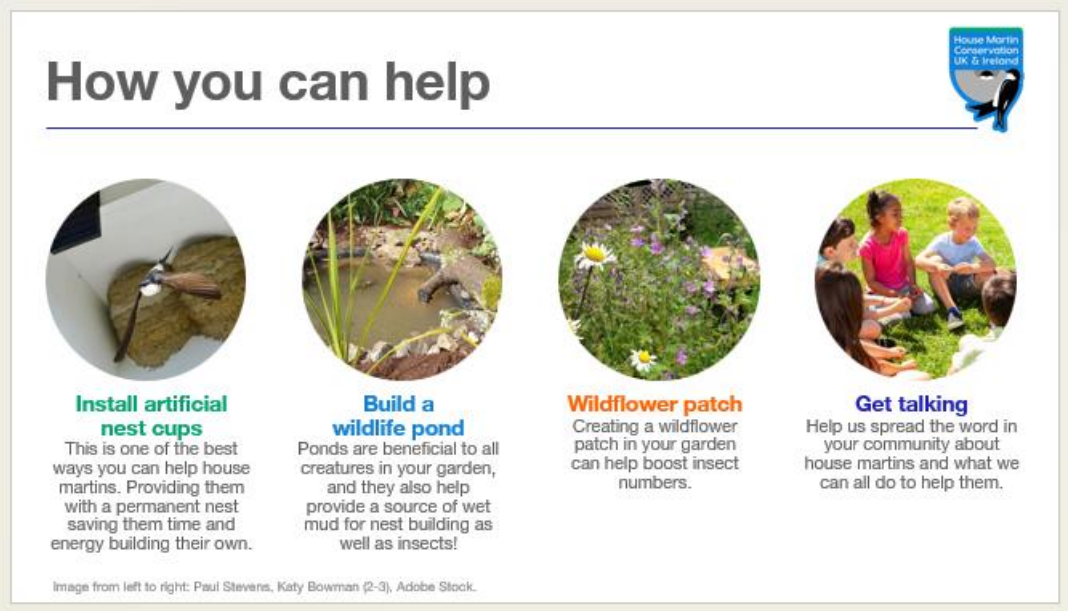
Both parents work hard collecting insects to feed the chicks.

The chicks leave the nest anywhere between 22-33 days, depending on the brood size and the availability of insects.

Once fledged, the young return to the nest to roost and to be fed for several days and can remain in the colony for several more weeks before they disperse to join pre-migratory flocks.

The fledged young of the first brood, have sometimes been observed helping to feed the chicks of the second brood.

Slide 10



Artificial nest cups: Due to the issues with mud availability, and drier and hotter summers causing nests to collapse, artificial nest cups are being installed to assist house martins to maintain their nest sites and successfully raise their young.

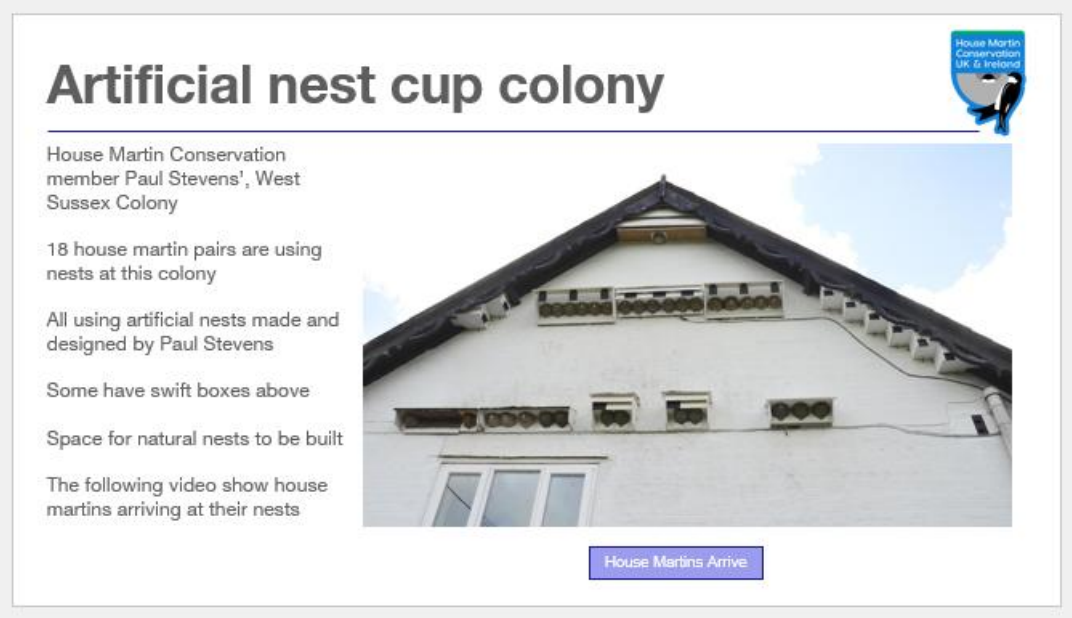
Artificial nest cups can also help house martins to extend their colony outwards, re-establish lost colonies, or create new colonies.

Ponds can help to provide a mud source, but also are a great source for flying insects, both as places where some species of insects are born and develop, but also where flying insects are attracted.

Wildflower meadows/patches are another great source for flying insects, as they provide food and shelter to them.

Get talking about house martins with family members, friends, and within your school and community. The more people learn about house martins and the issues affecting them, the more we can engage people to help!

Slide 11



This is a short video showing house martins arriving at a colony in West Sussex.

18 pairs of house martins have adopted this site as their breeding colony .

Although there are places here for the house martins to build natural mud nests, and there is a mud source nearby, they have all adopted artificial nests.

For a house martin returning each year to breed in a natural mud nest, they are hoping the mud nests are still in tact so they can get on with raising young without delay. The artificial nest provides a permanent nest that won't collapse or break.

House martins use mud to fill in any slight gaps around the artificial nest.

Artificial nests are not intended to replace mud nests altogether, but to offer house martins a chance to breed successfully, and increase their population.

They help to encourage house martins to set up colonies, and create mud nests alongside artificial ones as the colony grows. When installing artificial nests, space should always be made to enable mud nests to be built too.

At this site, there are swift nest boxes above some of the house martin nest cups. You may notice a swift in the video too. Swifts are also red listed in the UK.

Action: Click on the purple House Martins Arrive button to play the video.

Slide 12 – no notes