

Sparrowhawk



1. Life of a sparrowhawk

1.1. Courtship

When a young female was one year old the time came to start her own family, and she set out to find a suitable mate. She found a male of the same age but his range was of a poor quality. Other ranges and males had been taken by more experienced females, and she was unable to drive them from their mate and range. There were more females than males, so competition for a fit mate was high.

They would spend time together at their roosting site, call to each other and join in aerial displays. He then started to bring food to her which was an encouraging sign: he would be able to support her in the raising of a family. Some days he would deliver up to ten young birds. When he presented food to her or, later on, to the chicks he would usually remove the head and feathers first.

1.2. Nesting

He then searched for a suitable nest site, with her keeping an eye on him. When they had found one, they started the building of the nest. The nest was built high up in the fork of a pine tree. It was a bulky structure with a deep cup built from twigs and sticks. He mainly carried sticks whilst she did the construction. It took several weeks to build the nest.

As the male started to bring more song bird fledglings to the nest they knew that their food supply was increasing, and it was a good time to start a family.

In mid-April she was ready and laid four eggs, one every two days. She would sit on the eggs to incubate them and protect them from danger. This took a lot of time and she had to be so careful that she did not accidentally damage the eggs. She would doze off but be aware enough

to react to the slightest sign of danger. Every hour or so she would get up and look at the eggs and turn them. On cold days she would sit closely on the eggs, but on warm days she would move slightly away and just shade them from the sun.

She would keep her feathers in good condition by regular preening. Her mate would bring her food which for hygiene reasons she would eat away from the nest. She would also drop her mess away from the nest.

Towards the end of May, after about 33 days, the chicks hatched from their eggs. She could hear them for a couple of days before hatching, calling from inside their eggs and chipping away at the shell.

1.3. Growing up

The chicks were covered with thick white down and their eyes were open. They were wet and had little strength. The mother immediately sat on them to brood them and allow them to dry out using her body heat.

The male brought small dead birds to the nest which the female would tear up and feed to the chicks. Occasionally when conditions were bad she had to leave the nest to find food. Fortunately her chicks did not come to any harm. There was a risk that they could be taken by a tawny owl, or chilling if a storm suddenly occurred.

During the first week or so she was constantly brooding the chicks. As they grew and were better able to control their own body temperatures she was able to brood less and perch close by the nest. If an opportunity to seize a meal arose, she would take it. After two weeks or so she started to hunt again unless it was raining and she needed to protect her chicks. She would clean the chicks and keep the nest tidy by chucking bits of old food over the side of the nest.

The chicks grew rapidly, the females putting on the most weight, whilst the males were quicker at growing their feathers and developing sparrowhawk skills. The fact that the females were bigger than their brothers did not allow them to take more than their share of the food as the males were more agile than them.

They soon developed their feeding skills and were able to tear meat for themselves. They prepared for flying by opening their wings and practising flapping. They soon learnt to obtain lift and left the nest to perch on nearby branches. The males took their maiden flight after 26 days, but the females did not manage this until four days later.

As their flying skills improved they started to practise chasing small birds and finally made their first capture.

The parents continued to feed them for another three to four weeks. The chicks soon became independent of their parents and flew off to find their own range to provide them with food and eventually to breed.

Each year the female preferred to build a new nest in a different tree, although one year she did refurbish a disused magpie's nest.

As she became older and more experienced she was able to warn other females away from her mate and range. She would perform display flights and if this did not work she would chase them away.

1.4. Pair loyalty

She was never loyal to a male. If they did not feed her at the start of a breeding season she would move away and find a better quality mate. Likewise if a pair did not successfully raise chicks in the previous year they considered this a failure and would look for a new mate.

1.5. Sparrowhawk attack

The sparrowhawk had great manoeuvrability, could thread its way with dexterity and breath-taking speed among trunks and branches, twisting and turning with amazing ease. It was a good match for any fleeing song bird.

To avoid detection and to identify suitable prey it flew from perch to perch, pausing for a few minutes to scan the surrounding area before it moved on or launched an attack. You would have a job to see it as it tended to perch well hidden in the tops of trees. When it moved on, it dropped out of the tree, gained speed with a few flaps of its wings and hugged low over the ground or along hedges to remain undetected.

As it moved through its area it heard many alarm calls announcing its presence, and flocks of the faster birds rose into the air to fly away and the slower ones darted for cover. Flocking birds such as starlings bunched together and zigzagged in flight to try to confuse it. This made it harder for the sparrowhawk to concentrate on one particular victim.

However, when it got close to its quarry it made a direct flying attack, travelling at full speed and gliding silently straight towards the target. It relied on outpacing its prey so it did not need to think about concealment. If it could, it flew with the sun behind it or a large object to partially hide its approach, e.g. a tree or hedge. It usually snatched its victim from the ground or perch, but often they fell to the sparrowhawk in trying to fly away. If the quarry put up a good attempt to get away the sparrowhawk used all its flying skills and concentration to catch it. If it had to chase the quarry it tried to approach from their blind spot just behind them and swing up to seize them. However, it could not cope with long chases as this used a lot of energy and the sparrowhawk would usually give up after a short while. Around one in ten attacks were successful. If a small bird reached impenetrable cover what was the point in prodding away trying to grab hold of it?

When the sparrowhawk caught a bird it grabbed it in its feet and squeezed, stabbing it with its needle-sharp claws. It could catch prey bigger than itself but it could not fly very well with it, so it dealt with it on the ground. It held the prey down with its feet and immediately started to pluck it and eat it alive. If the prey tried to fight back the sparrowhawk made sure that the prey remained as still as possible.

If it could not eat its prey in one sitting it cached the food for later consumption. It ate as quickly as it could in case other predators tried to steal its food or even attack it.

1.6. Survival

If food is scarce a pair may desert their clutch.

When the weather is bad this impairs a pair's hunting ability and food can become short. If a female has to leave the nest to support her mate in finding food then there is a risk that the chicks will get wet, chill and die from the cold.

If the young are in danger they will try to defend themselves by crouching down and calling for a parent. They walk out onto the branches, hold on tight to the branches and strike out at the attacker with their feet.

In the first year two of the chicks died through starvation and were eaten by their mother as she was so hungry.

1.7. Problems created by humans

In the past, sparrowhawks have suffered severely from the use of toxic agricultural chemicals on farm land. Fortunately the situation has improved and the sparrowhawk population in Britain has increased.

2. General data

2.1. Identification

Size	Males are smaller than kestrels. Females weigh twice as much as males.
Appearance	Small heads, slim bodies short broad wings, long tails, long thin legs and staring yellow eyes. Females - upperparts are grey-brown and underparts are paler with dark bars running across them. Males - have blue-grey upperparts and bars on reddish-brown underparts.
Confusion	With kestrels.
Sound	Mainly silent.
When	Secretive birds. Early morning when hunting. Watch how other birds are behaving. A flock of birds may suddenly be scared and rise into the air trying to escape a sparrowhawk's attention. You may suddenly hear lots of

	alarm calls.
Where	A pair does not always share the same range. A male prefers to stick closely to the woodland, whilst a female will venture out onto open land. Can be seen coming into gardens.
Movement	Great manoeuvrability and speed and able to twist and turn with amazing ease.

3. Staying alive

3.1. Feeding

Female favourites	Wood pigeon, chaffinch, song thrush, blackbirds and starlings. As they are easier to catch, they will eat fledglings when they are in season.
Male favourites	Great tits and blue tits. Will avoid tackling larger birds such as the wood pigeon.
Habits	Stealth attacks when hunting.
Other	As song birds fledge at different times during the breeding season sparrowhawks can vary their diet. The song birds are usually easy pickings. Some song birds have more than one clutch in a year, so young meat can be available for a longer period of time. Outside the breeding season they will eat winter visitors such as the redwing or fieldfare.

4. Useful words

4.1. Words about the sparrowhawk

See if you can find the following words in the word search.

Sparrowhawk, exhausted, hygienic, agile, lift, spoilt, zigzag

S	P	A	R	R	O	W	H	W	E
D	R	T	Y	O	I	O	A	L	Q
F	T	L	I	O	P	S	W	P	U
B	J	K	M	K	A	F	K	L	A
G	E	X	H	A	U	S	T	E	D
A	E	X	W	G	J	S	G	E	H
Z	I	P	H	I	I	L	R	K	F
G	T	F	I	L	O	B	I	M	S
I	R	Y	T	E	Y	Y	U	B	Z
Z	H	Y	G	I	E	N	I	C	C

4.2. Unscramble the following words

URE STR UCT	
DL PI RA Y	
RE CAP TU	
VE RE MO	
PI IN CK GS	
CK NG TA LI	
LE ED NE	
N L B I D	
IVE RET SEC	
RE AD TH	

4.3. Understanding and problem solving

Now that you know about sparrowhawks have a go at answering these questions.

List some of the sparrowhawk's favourite foods.

How is a female likely to react if a male does not begin to feed her at the start of a breeding season and why?

How does the way a female sits on her eggs differ on hot and cold days?

Why does a female eat her food, and make her mess, away from the nest?

Describe how a sparrowhawk makes a direct flying attack.

Why will a sparrowhawk not chase birds for long periods of time?

How do flocking birds manage to confuse a sparrowhawk?

How are smaller male sparrowhawks able to compete for food with larger females in the nest?