

Wings Over Wiltshire

A Season-Long Guide to Our Flying Dragons

If you sit by a garden pond in Malmesbury or the surrounding villages, stroll along the banks of the Avon, or explore the vast lakes of the Cotswold Water Park, you will likely witness a masterclass in aviation. Clad in iridescent blues, emerald greens and fiery reds, dragonflies and damselflies are the undisputed lords of our skies from late spring until the first autumn frosts.



Downy Emerald Dragonfly. Credit Steve Berrow

Yet, the dazzling insects we see darting over our waters are just the brief, final chapter in a much longer, darker story hidden right beneath the surface.

The Secret Underwater Life

The most surprising fact about these aerial masters is that they spend up to 95% of their lives underwater. What we recognize as a dragonfly is merely their brief reproductive adult stage, which lasts just a few weeks to a maximum of two months.

Their lives begin as an egg dropped into a Wiltshire pond, river, or ditch. Once hatched, they enter the nymph (or larval) stage, living in the murky depths for anywhere from one to five years.

Far from elegant, nymphs are heavy-jawed, muddy-brown, aggressive predators. They breathe underwater through internal gills located inside their rectums—and can even pump water out of their rear ends to propel themselves forward like tiny jet skis when chasing prey.

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The Great Escape: Ghostly Skeletons

When that long underwater childhood finally comes to an end, a spectacular transformation takes place. On warm mornings starting as early as late April and May, the nymph crawls out of the dark water, scaling the stem of a reed, iris, or pond-side plant.

Once firmly anchored, its muddy skin splits open along the back. The soft, crumpled adult slowly pushes its way out, pumps fluid into its brand-new wings, and flies away into the sunshine. Left behind on the stem is the exuvia—the empty, rigid exoskeleton of the nymph. These look exactly like intact, hollow 'ghost bugs' still fiercely clutching the vegetation.

Dragonfly or Damselfly? How to Spot the Difference

While they belong to the same insect family tree (Odonata), telling these two aerial acrobats apart is incredibly simple once you know what to look for.

Feature	Dragonfly (Anisoptera)	Damselfly (Zygoptera)
At Rest	Holds wings flat and wide open, like an airplane.	Folds wings flat along its back, sleek and closed.
The Eyes	Massive, wrap-around eyes that touch at the top of the head.	Smaller, distinct eyes placed on opposite sides of the head (like a hammerhead shark).
Body Shape	Chunky and robust with a thicker abdomen. The hind-wings are broader than the fore-wings.	Needle-thin and delicate. All four wings are exactly the same size and shape.
Flight Style	Powerful, direct, and incredibly fast—true masters of the wind.	Fluttering and gentle, looking more like a metallic butterfly.

The Quick Rule of Thumb

If it looks like a chunky, aggressive fighter jet patrolling the middle of the pool, it's a dragonfly. If it is a tiny, delicate jewel gently fluttering through the reeds at the water's edge, it's a damselfly.

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The North Wiltshire Dragonfly Season

As the season changes, so do the species you will see across our local region as the months roll by:

- **May – June (The Early Risers):** Keep an eye out for the Four-spotted Chaser, a medium-sized brown dragonfly easily identified by the dark spots halfway down its wings. Alongside it flies the scarcer Hairy Dragonfly (named for its fuzzy thorax) and the brilliant Large Red Damselfly, which is often the very first to emerge in local garden ponds.
- **July – August (The Midsummer Peak):** The absolute climax of the season. Look out for the massive, brilliant blue (male) Emperor Dragonfly cruising over large lakes (female is bright green). Along the flowing waters of the River Thames and the Avon, look for the stunning Banded Demoiselle, a metallic blue damselfly with dark thumbprint patches on its wings. Deeper gravel pits will host vast swarms of Common Blue Damselflies.
- **September – October (The Autumn Survivors):** As temperatures cool, the highly inquisitive Southern Hawker and Migrant Hawker take over, frequently hovering right at eye-level to check you out. You will also see thousands of Common Darters, which first emerged in mid to late June or early July, can still be seen in large numbers basking on sunny wooden gates and paths well into the autumn.



Broad-bodied Chaser. Photography credit Steve Berrow

Unusual species to spot

Beyond more familiar seasonal residents, North Wiltshire's varied wetland networks host several species which are unusual in many places but quite common in the Cotswold Water Park. Along

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well-vegetated ditches, small garden ponds, and slower-moving waters, keep a lookout for the strikingly flat, broad, powder-blue abdomen of the **Broad-bodied Chaser** (*Libellula depressa*) or the stocky, intense blood-red form of the **Ruddy Darter** (*Sympetrum sanguineum*), which prefers



Ruddy Darter. Photography credit Teresa Farr

quieter bodies of water.

Our local reserves, such as Lower Moor Farm, harbour highly specialized species like the shimmering **Downy Emerald** (*Cordulia aenea*) emerging early in the season along woodland boardwalks. Also frequently spotted is the **Black-tailed Skimmer** (*Orthetrum cancellatum*) basking flat against sunny paths and gravel pit margins.

Voracious Predators: What They Eat

- **Underwater Nymphs:** They possess a unique, hinged lower jaw called a 'mask' that shoots forward in a fraction of a second to snag passing prey. They eat tadpoles, small fish, mosquito larvae, and even other dragonfly nymphs.
- **Airborne Adults:** Once they take to the wing, they switch to an aerial diet. They form a basket shape with their legs to scoop up midges, flies, butterflies, and mosquitoes mid-air. Their hunting success rate is an astonishing 95%—making them far more efficient killers than lions or sharks.

The Midsummer Climax & Changing Landscapes

During their summer peak, highly territorial males aggressively patrol patches of water. When a male finds a mate, they engage in a unique mating position known as the 'wheel' or 'heart' formation. The male grasps the female by the back of her head using special claspers at the end of

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his tail. The female then loops her abdomen forward to collect sperm from the male's secondary genitalia at the front of his body. They often fly while locked together in this intimate circle.

After mating, you will often see them flying in tandem, or the male guarding the female from a nearby perch, as she dips her tail into the water or slits open a plant stem to deposit her eggs, a process known as ovipositing.

Apart from breeding, this adult flying stage allows species to move into brand-new territories. For instance, the Lesser Emperor—originally a continental species—only appeared in Britain 40 years ago but is now expanding across southern England and into Wiltshire due to our warming climate.

How You Can Help: Create a Dragonfly Haven

You don't need a massive estate to help Wiltshire's dragonflies; even a small garden pond can become a vital stepping-stone habitat. Because many natural wetlands across the UK have been lost, garden ponds have become essential lifelines for breeding insects.

To make your pond a true five-star dragonfly resort, you need to think like a builder and provide the right architecture. Dragonflies need different types of native plants at each distinct stage of their life cycle.

The Lifecycle Planting Guide

To cater to every stage from nymph to adult, aim for a mix of these three plant types:

- **1. Underwater Oxygenators (For Nymphs to Hide & Hunt):** These plants grow entirely submerged. They keep the water clear, produce oxygen, and create a dense, underwater jungle where nymphs can lurk, hunt mosquito larvae, and hide from hungry birds. *Top Picks:* Hornwort (*Ceratophyllum demersum*) or Spiked Water-Milfoil (*Myriophyllum spicatum*).
- **2. Floating-Leaved Plants (For Egg Laying):** Adult females use floating leaves as landing pads. Species like the Emperor Dragonfly will land on a flat leaf and curve their tails underwater to glue their eggs directly onto the underside of the foliage. *Top Picks:* Broad-leaved Pondweed, Frogbit (*Hydrocharis morsus-ranae*), or native White-Water Lily (*Nymphaea alba*).
- **3. Tall, Emergent Marginal Plants (For the Great Escape):** These are the most critical plants for the final transformation. When a nymph is ready to become an adult, it needs stiff, vertical stems that breach the water's surface. It climbs up these 'ladders' into the open air to shed its skin. *Top Picks:* Yellow Flag Iris (*Iris pseudacorus*), Flowering Rush (*Butomus umbellatus*), or Lesser Pond Sedge (*Carex acutiformis*).

Three Quick Tips for a Dragonfly-Friendly Pond

- *Skip the Fish:* Avoid adding goldfish or koi. They are voracious predators that will quickly snack on all your dragonfly eggs and larvae.
- *Create a Sloped Edge:* Ensure at least one side of your pond slopes gently like a beach. This allows shallow-water plants to thrive and gives nymphs an easy route out of the water.

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- *Add a Sunbathing Rock: Place a few flat, dark stones on the sunny northern edge of the pond. Adult dragonflies are cold-blooded and love to absorb heat from the stone to fuel up for flight.*

Local Focus: North Wiltshire Hotspots

To spot these incredible insects for yourself, visit these key local environments:

- **The Cotswold Water Park:** With over 180 lakes, this is a world-class hotspot. Deeper lakes support thousands of Common Blue Damselflies, while the warm, shallow margins of older gravel workings are perfect for Black-tailed Skimmers.
- **The Upper Thames Valley:** Ideal flowing-water habitats to view the elegant, fluttering Banded Demoiselles (Damselflies) and active Hawkers patrolling the bankside vegetation.
- **Your Own Back Garden:** Garden ponds across North Wiltshire act as crucial stepping-stone habitats, particularly for early Large Red Damselflies and curious late-season Southern Hawkers. Many of our ponds have been removed in recent years reducing essential habitat for Dragonflies, Damselflies and a whole host of our precious amphibians. If there's one thing you can do to help wildlife, it's to add a garden pond.



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