

Insects

The fauna of the Drawa National Park's dragonflies is not only very rich, but also very natural and typical for the woodsy, rich in water bodies and sources, areas of Central and Eastern Europe. The most popular by riversides are the slender *Calopteryx*. The males are metallic navy-blue, and the females – green or brownish. Near running waters one can also find the big *Gomphus* – black with a yellow design, fast-flying above the water or sitting in the sun. This species is very numerously present in Poland. Very common is also the species-protected *Omphiogomphus cecilia*, most commonly seen in July and August. Some unique dragonflies are associated with peatbogs and dystrophic lakes. The most rare and most precious is the unassuming, endangered in Poland, tiny *Nahalennia speciosa*. Also connected to peatbogs are: *Aeshna isosceles*, four different species of *Leucorrhinia*, and the rare and protected *Sympetrum peadisca*. Over the peatbog ponds very numerous are *Cordulia* and *Lestes*. Many dragonflies can be seen flying over the lakes, where the coastal vegetation is abundant: *Aeshna grandis*, *Somatochlora*, or *Libellula quadrimaculata*. Often seen above the lakes and ponds are the tiny and slender *Coenagrion*, *Enallagma*, *Lestes*, *Platycnemis*, *Ischnura*, and the bright-red *Pyrrhosoma nymphula*. Although dragonflies are tightly connected to water communities, in summertime they can be seen far away from the water, as well. In shade and semi-shade, often also at dusk, above roads and meadows flies the big *Aeshna cyanea*, and by the sunny roads appear the smallish *Sympetrum* and *Orthetrum*. Dragonflies are the most numerous near some of the peatbog ponds, and also on the banks of some larger lakes. Especially rich in that respect are the far edges of gully lakes. Some dragonfly species, such as *Calopteryx*, are very numerous in the Park. To ensure that this continues we need to keep the waters very clean and protect their natural character, as well as the diversity of water vegetation, the mossy peatbogs, and the dystrophic lakes with their characteristic vegetation.

About 50 different species of day butterflies have been found to exist in the Drawa Wilderness. We all know the easily recognizable large white, brimstone, peacock, admiral, camberwell beauty, comma, painted lady, large tortoiseshell, and small tortoiseshell. Some locally unique butterflies, however, are more difficult to recognize: palla's fritillary, chequered skipper, large copper, heath fritillary, or grayling. The groups of coppers and blues are especially rich in the numbers of different rare and difficult to distinguish species. Also worthy of mentioning are these 2 handsome species: swallowtail is still somewhat common in the Barnimie area, especially on grassy hillsides. Purple emperor can be seen in all of the Drawa Wilderness. The caterpillars of this species are feeding on aspen poplars; the butterflies, however, are most commonly seen on horse's droppings, which are their

delicacy. More differentiated is the fauna of small butterflies and night moths. Some of those species that are inclined to massively reproduce are problematic to the forest managers. In the 1980's the tussock moth had damaged most of the spruce forests, and since its population has been closely observed. The bark beetle has similar inclinations. Aside from several moth species that have economic significance, little is known of the moth fauna of the Drawa Wilderness, for thus far no one has researched it. Entomologists agree that the number of different butterfly species has decreased in the recent decades. This process did not spare the Drawa National Park. In order to preserve the present state, at least, we have to ensure the survival of those places, where butterflies thrive, such as flowery meadows, peatbogs, wetlands, as well, sunny lawns.

The best researched group of beetles in the Drawa Wilderness are the longhorned beetles. They are slender insects with long horns, often seen on the flowers of umbelliferous plants, but also on leaves and tree trunks. The most handsome longhorned beetle is *Ergates faber*, a black beetle reaching the length of 15cm that likes to spend time on pine trunks warmed by the sun. Entomologists have chosen *Acanthocinus aedelis*, a beautiful greyish-blue beetle with characteristic horns that are longer than its body, as the insect-symbol of the Park. Natural forests are still home to *Leptura maculata*, a beetle already rare in most of the Polish lowlands. In the Park it is still quite common because of the several-hundred-hectare large old beech woods. The yellow-and black beetles of this specie are most commonly seen sitting on flowers. In old beech woods and on their edges, on flowers and on wood piles, one can also find the beetle *Clytus arietis*. *Clytus arietis*, and somewhat similar to them *Plagionotus acuatus*, have colouration reminiscent of bees, which is a form of protection against being eaten by the birds. In old forests and their surroundings one can see the handsome *Prionus corianus*. The Drawa population of *Serpeda* beetles belongs to the more numerous in Pomerania thanks to the beavers that, by cutting the aspens, provide adequate amount of dead wood necessary for the *Serpeda* larvae to develop. Sometimes the metallic-green *Aromia moschata* can also bee seen in the Park. The *Corymbia*, *Spondylis buprestoides*, *Rhagium*, and *Strunella melanura* beetles are the easiest to find in the Park. It's good to remember, however, that over 50 species of this group are present in this area. The most rare is *Phymatodes glabratus*, an unassuming little beetle whose larvae live in dead and dying wood of the sun-bathed juniper trees near Pustelnia. Very little is known about other beetles of the Drawa Wilderness. Some representatives of this group are the fast racer-beetles, the slow dung-beetles, the flying tiger-beetles, and the common lady-birds