LOCAL SPECIES ACTION PLAN

Dragonflies and Damselflies

Black Darter (*Sympetrum danae*)

Current status

Dragonflies and **Damselflies** are a distinct group of insects belonging to the order Odonata and placed in the Families Anisoptera ("different wings") and Zygoptera ("paired wings") respectively. The differences between the adult forms of damselflies and dragonflies, in addition to the wing shapes, are straightforward. Damselflies are much smaller dainty fliers with great manoeuvrability. When at rest, the wings are held closed along the line of the abdomen. This contrasts with the dragonflies, whose wings are held open at right angles to the thorax. Dragonflies also differ by being larger, more striking looking insects, with a dramatic forceful flight. The abdomen is more varied in shape, with the hawker types being slim and vividly coloured, compared with the chasers and darters which are shorter and more robust.

There are 38 species that regularly breed in Britain with 22 recorded in Scotland, many with a restricted distribution. At least 10 species occur within the Glasgow City boundary: **Emerald Damselfly** (*Lestes sponsa*), **Large Red Damselfly** (*Pyrrhosoma nymphula*), **Common Blue Damselfly** (*Enallogma cyathigerum*), **Blue-tailed Damselfly** (*Ischnura elegans*), **Azure Damselfly** (*Coenagrion puella*), **Common Hawker** (*Aeshna juncea*), **Common Darter** (*Sympetrum striolatum*), **Black Darter** (*Sympetrum danae*), **Four-spotted Chaser** (*Libellula quadrimaculata*) and **Golden-ringed Dragonfly** (*Cordulegaster boltonii*).
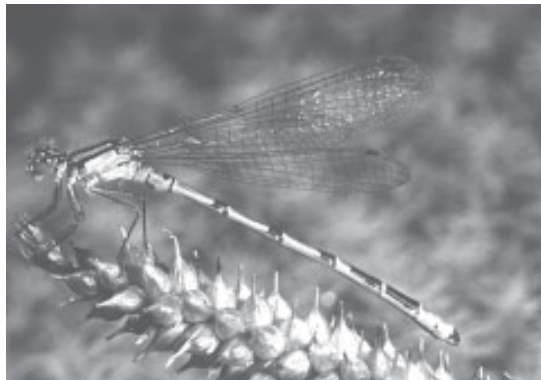
Common Blue Damselfly (*Enallogma cyathigerum*)

Unpolluted water bodies are used for egg laying and the larval stage usually takes one to two years to complete, even longer at colder, upland sites.. The larvae are predators feeding on other invertebrates, tadpoles and even small fish. After emerging, the adult stage is relatively short-lived (only a few weeks). Adults require shrubs and trees nearby for shelter, and open ground containing a variety of plants supporting invertebrate prey is essential for feeding.

Dragonflies and damselflies are locally fairly common within the Glasgow City boundaries in suitable wetland habitats. The requirements of different dragonflies vary and many sites hold only a few species.

Current factors causing loss or decline

There is little data to work out specific trends in the Glasgow area but it is likely that many populations will have suffered during recent times. The main factors causing loss are:

- Loss or fragmentation of habitat
- Infilling of breeding ponds
- Drainage of ponds and wetlands on farms
- Pollution from agricultural industrial and domestic sources
- Vegetation succession can cause wetlands to dry out or trees to cast suppressive shade
- Introduced predatory fish can affect larva populations

Current action

There are no specific protection measures for any species found within the Glasgow area. All of the key water bodies and associated wetlands are protected by being part of Sites of Importance for Nature Conservation (SINCs) or Sites of Special Scientific Interest (SSSI's).

Objectives and targets

Object 1: Establish current distribution and status of all known populations.
Target 1: Survey known populations and search for new sites.

Object 2: Maintain the current distribution and population sizes.
Target 2: Ensure no further loss or damage to the surviving populations.

Object 3: Introduce appropriate habitat management to encourage viable populations.
Target 3: Assess and modify current management factors at all known sites.

Object 4: Increase population sizes and number of sites.
Target 4: Create suitable habitat at appropriate sites.

Proposed Action with Lead Authorities

Action	Lead	Delivery	Objective
Policy and Legislation			
Ensure Policy Planning Guidelines include adequate protection policies for water levels and quality.	GCC-LS(CRS)	GCC, SEPA, SNH	2, 3
Site Safeguard and Management			
Encourage landowners, managers and users to implement sympathetic management.	GCC-LS(CRS)	FWAG, GCC-LS, SNH	2, 3, 4
Oppose, or suggest alternatives and mitigation measures, planning applications that will cause damage to sites holding significant populations of dragonflies or damselflies.	GCC-LS(CRS)	GCC, SNH	2, 3
Species Management and Protection			
Implement sympathetic management at presently known sites and introduce similar regimes on other sites.	GCC-LS(CRS)	GCC-LS, SNH	2, 3, 4
Advisory			
Ensure information and guidance on conservation management is available.	GCC-LS(CRS)	GCC-LS, FWAG, SNH	2, 3, 4
Future Research and Monitoring			
Monitor known Glasgow sites.	GCC-LS(CRS)	GCC-LS(CRS)	1
Survey for new and potential sites.	GCC-LS(CRS)	GCC-LS(CRS)	1, 4
Carry out surveys to estimate population sizes.	GCC-LS(CRS)	GCC-LS	1
Communication and Publicity			
Promote dragonflies and damselflies as attractive local species through education events and conservation publicity.	GCC-LS(CRS)	FWAG, GCC-LS(CRS), SNH	1, 2, 4
Links with Other Plans			
Co-ordinate with the wetlands, Reed Bunting, Water Vole and amphibian Action Plans.	GCC-LS(CRS)	All	1, 2, 3, 4
Review progress of plan and actions by 2010.	GCC-LS(CRS)	GCC-LS(CRS)	1, 2, 3, 4

Glasgow City Council: Development and Regeneration Services***(GCC-DRS)***, Glasgow City Council: Land Services(Conservation Group) ***(GCC-LS(CG)***,

Glasgow City Council: Culture and Leisure Services ***(GCC-CLS)***, Glasgow City Council: Education Services ***(GCC-ES)***, Glasgow City Council: Land Services Countryside Ranger Service ***(GCC-LS(CRS)***,

Scottish Ornithologists' Club ***(SOC)***, Greenspace for Communities***(GfC)***, British Waterways ***(BW)***, Forestry Commission ***(FC)***, Farming Wildlife Advisory Group ***(FWAG)***, The WISE Group ***(TWISE)***,

Glasgow Natural History Society ***(GNHS)***, Royal Society for the Protection of Birds ***(RSPB)***, Scottish Environment Protection Agency ***(SEPA)***, Scottish Natural Heritage ***(SNH)***, Scottish Wildlife Trust ***(SWT)***,

Clyde Amphibian and Reptile Group ***(CARG)***, Butterfly Conservation ***(BC)***.