



- the scheme for surveying Jersey's pondlife!

**Dr John W. Wilkinson**

Amphibian and Reptile Conservation



## Pondwatch – ID:

- Amphibians (and grass snake)
- Dragonflies and damselflies
- Other invertebrates
- Fish
- Non-native plants



# Palmate newt

◀————▶  
< 9 cm,  
often much smaller



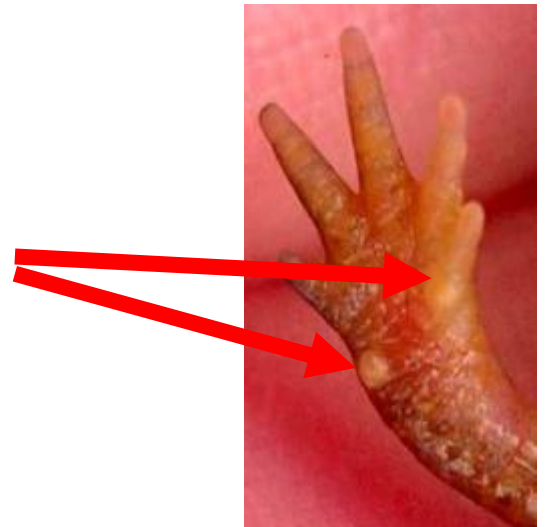


Palmate ♂



Palmate ♀

Two pale  
tubercles/nodules



# Comparing newts and lizards





# Agile frog



< 9 cm





# Toad / crapaud

< 8 cm (males)

< 12 cm (females)



# Toad / crapaud

< 8 cm (males)

< 12 cm (females)





# Comparing frogs and crapauds



# Alien amphibians



**common frog**



**green frog**



**fire-bellied toad**



**Japanese fire-bellied newt**



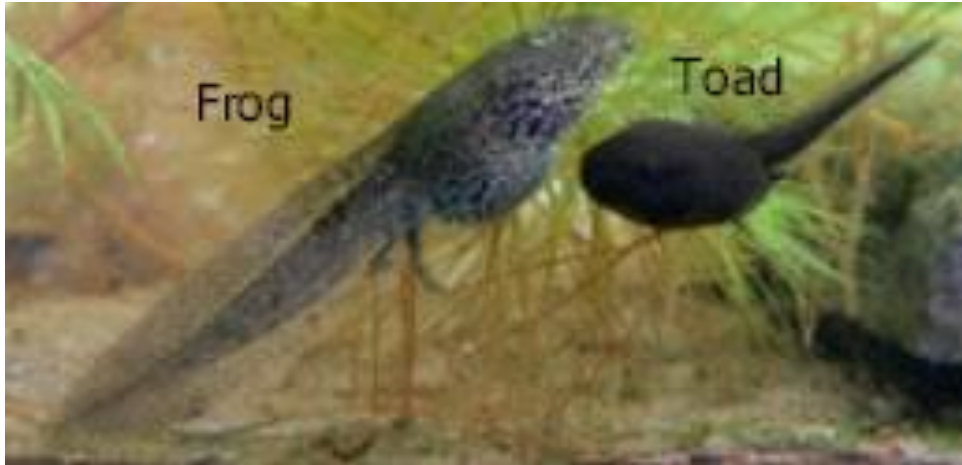
**great crested newt**



# Amphibian eggs



# Amphibian tadpoles





## *Grass snake*



**Fast and alert, slender, largest native reptile**

## *Grass snake*



Green, grey or brown, usually yellow collar





© Tracy Farrer

*....and this is?*





# Resources

British Dragonfly Society website  
(<https://british-dragonflies.org.uk>)



Includes **Dragonfly and Damselfly Identification Help** page.

Working to conserve dragonflies and their wetland habitats

[Log in](#)



[Home](#) [About Us](#) [Dragonflies](#) [Conservation & Research](#) [Recording](#) [Get Involved](#) [News & Events](#) [Membership & Shop](#)  [Search](#)

[Dragonflies](#) » [Identification Help](#)

## Dragonfly and Damselfly Identification Help

Have you spotted a Dragonfly or Damselfly and need help to identify it?

The following tips should help you to identify most species.

This page does not currently include most vagrant and migratory species. For these species visit our [species profile pages](#).

For a more comprehensive guide to Dragonfly identification please check out the range of fantastic Dragonfly guide books available via [our shop](#).

Is it a Dragonfly or a Damselfly?

# Important ID features



Frons (face) markings and eye coloration

Side markings on the thorax.

Leg coloration.

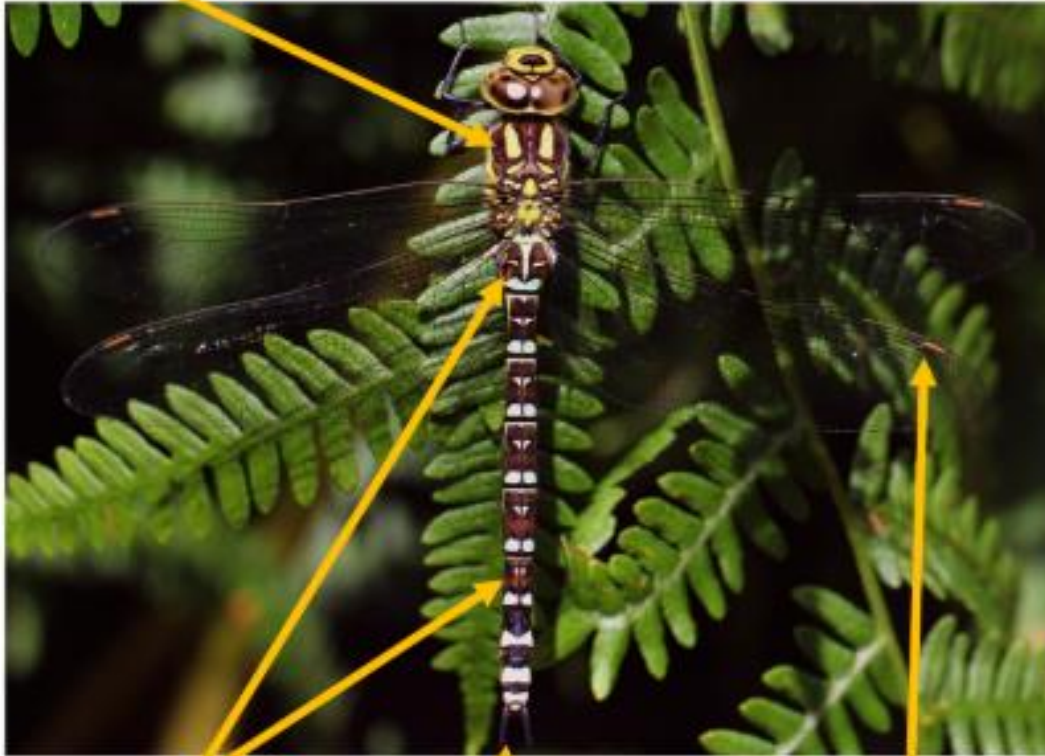
Side markings on the abdomen.

Anal appendages.



# Important ID features

Antehumeral (thorax) markings



Abdomen markings

Anal appendages

Wing markings/  
coloration

# Dragonfly or Damselfly?



Feature	Dragonfly	Damselfly
<b>ADULTS</b>		
Body	Robust	Thin and delicate
Wing position at rest	Open	Closed*
Wing shape	Different between front and back	Same between front and back
Eye position	Touching at the top of the head*	Not touching at the top of the head
Flight	Strong and purposeful	Weak and fluttering
<b>NYMPHS</b>		
Rear appendages	Stiff, short and spiky (x 5)	Soft and flexible gills (x 3)
Body	Stout	Long and slender

\*for most species





Photo: Tim Ransom



Photo: Tim Ransom

# What sort of Dragonfly?

## Hawkers and similar species:

Generally dark with bright spots or stripes.

Some mostly brown. Can be brightly coloured with a thick black mid-line stripe. Never with dark wing marks other than the wingspots (rectangular marks at the tip). Generally large, robust but thin bodied.

## Darters and chasers:

Generally have a blue, red, yellow or brown body or a combination of some of these colours. Sometimes with black markings. Some with additional dark marks on the wings. Generally smaller and stout bodied.

## Emeralds:

Almost entirely emerald green coloured, usually metallic. Often bright green eyes. Sometimes with bronze tints.



Photo: Tim Ransom

© Tim Ransom



# What species?

Compare your notes and photos against a guidebook or using the resources at <https://www.british-dragonflies.org.uk>.



## Species to look out for:

Beautiful demoiselle  
(*Calopteryx virgo*)



Photo: Tim Ransom

Southern emerald damselfly  
(*Lestes barbarus*)



Photo: Tim Ransom

Field Guide to the  
**Dragonflies and  
Damselflies**  
of Great Britain and Ireland



Steve Brooks  
Illustrated by Richard Lewington

revised  
edition

All the resident and migrant species fully described and  
illustrated with more than 280 colour illustrations

**Field Guide to the  
larvae and exuviae of  
British Dragonflies**

Damselflies (Zygoptera) and Dragonflies (Anisoptera)



Steve Cham



# Nymphs / Larvae

Dragonfly nymph



← Stout body

← 5 stiff, short spiky appendages

Photo: Dave Huth

Damselfly nymph



Slender body →

→ 3 soft flexible gills

Photo: Charles J Sharp / Wikimedia commons



**Greater water boatman (or backswimmer)**





**Whirlygig beetles**



**Stoneflies**







**Diving beetle larva**



**Great diving beetle**





By Bernard DUPONT from FRANCE - European  
Eel (*Anguilla anguilla*), CC BY-SA 2.0,  
[https://commons.wikimedia.org/w/index.php?  
curid=40745254](https://commons.wikimedia.org/w/index.php?curid=40745254)



**Pumpkinseed**



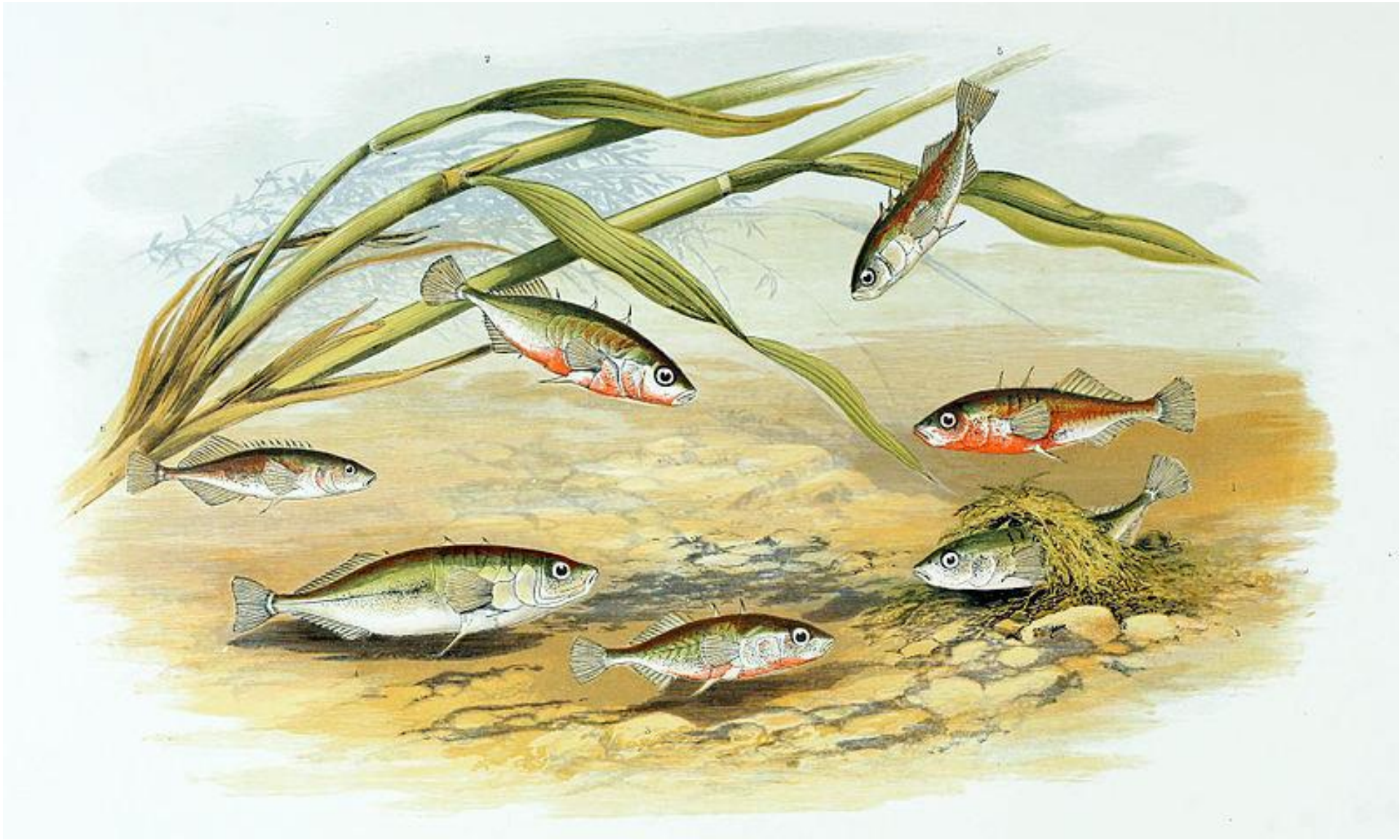


Spined loach © Wim Rubers - Creative Commons Attribution 3.0 Unported



Stone loach by OpenCage.jpg Creative Commons Attribution-Share Alike 2.5 Generic





**Three-spined stickleback**

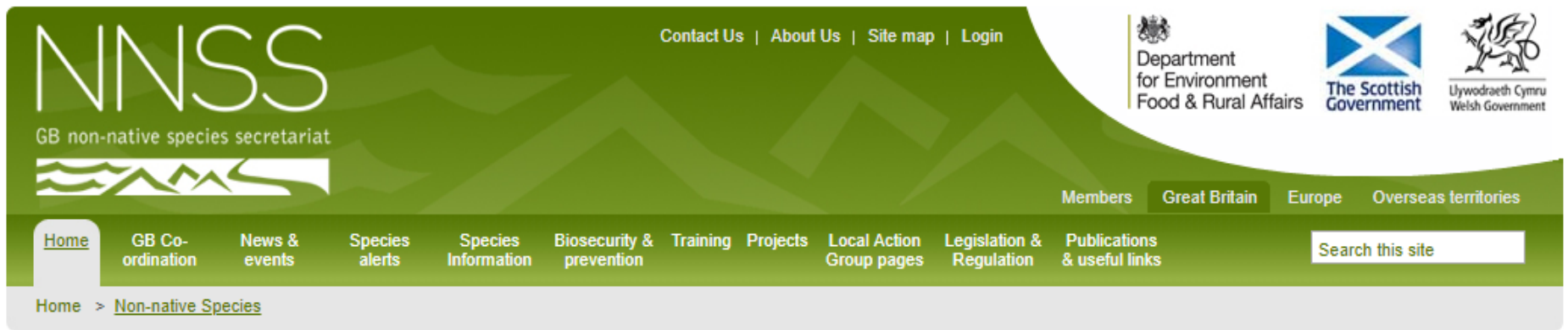
**...and larger fish in some reservoirs!**

# Resources

GB non-native species secretariat  
(<http://www.nonnativespecies.org>)



Includes **Species Identification sheets** and an **E-learning** course (*Module 2b. Identification of Invasive Freshwater Plants*).



## Welcome to the GB non-native species secretariat website

First published in 2008 and updated in 2015 the GB Invasive Non-native Species [Strategy](#) was developed to meet the challenge posed by invasive non-native species in Great Britain. This website provides tools and information for those working to support the strategy.



Be plant wise and  
don't dump aquatic



### Search for information on a non-native species

GO



### News [\(archived news\)](#)



**RAPID LIFE project:** Contract advertised for programme of workshops to increase awareness of 'alert' species and how to report them.

08 February 2019



**New NNSS email address**  
03 January 2019



**Report floating pennywort this winter,** says Environment Agency  
18 December 2018



# Water fern (*Azolla filiculoides*)

## Key ID Features

Usually green but often has a reddish tinge and can be completely red when exposed to stresses





# New Zealand pigmyweed (*Crassula helmsii*)

## Key ID Features

Forms dense mats within the water body



- Forms dense mats within the water body
- Flowers very small, often absent, whitish-green to slightly pink
- Flowers have 4 petals



# New Zealand pigmyweed (*Crassula helmsii*)

## Identification of different forms

- *Terrestrial (left)*: Growing away from water's edge or left stranded as water level falls, creeping stems and aerial, fleshy leaves.
- *Emergent (middle)*: Densely packed leaves in water, intermediate between terrestrial and submerged form (occurs in water <0.6m deep.)
- *Submerged (right)*: Elongated stems with leaves sparse and flat, able to form extensive mats on bed of water body.





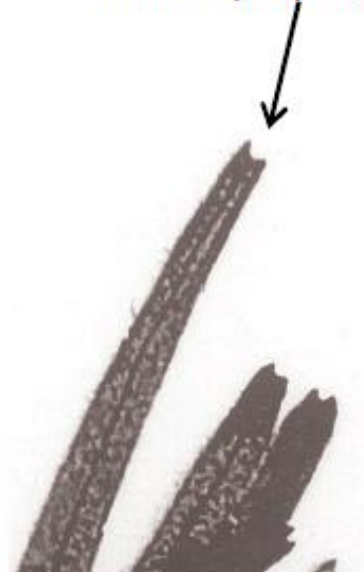
# New Zealand pigmyweed (*Crassula helmsii*)

– similar species

A group of species known as water-starworts are most likely to be confused with New Zealand pigmyweed. Water-starworts are distinguished from New Zealand pigmyweed by their non-fleshy leaves, which are usually notched at the tip (hold up to light or use hand lens), and lack of collar at leaf base.



Water-starwort leaf with typically notched tip, a hand lens is usually required to see this properly





# Canadian waterweed (*Elodea canadensis*)

**Canadian Waterweed**  
(*Elodea canadensis*)



Leaves up to 2 cm long, in whorls of 3, widest at middle and either pointed or rounded at end

- Flowers are small and inconspicuous and petals white or white tinged with red and borne on end of very long fine stalk.

# Parrot's feather (*Myriophyllum aquaticum*)

- Changes form depending on the conditions, varying between submerged to emergent foliage.
- Both forms are similar in appearance
- Emergent leaves are stiff, bright green and the most distinctive form.
- Submerged leaves are more fragile and, after death, decompose quickly.

Leaves bright to blue-grey green



Stem breaks easily, brown roots present around nodes

Leaves form in whorls of 4-6



1cm



Stems can grow to 2m tall

Emergent leaves more robust

Forms inconspicuous flowers at base of leaves between May and August. Small (2mm) and white. Can be difficult to see.



Finely divided leaves, feather-like



**Thanks for listening!**

