



Welcome to the first issue of **CHAROPHYTES**, a newsletter dedicated to all things related to, you guessed it, charophytes! It is intended that this will be an informal, occasional publication. Its frequency will depend entirely on the availability of new material, so please, send in your observations, records, photos, finds, comments or suggestions to Maria (maria.long@bsbi.org) or Áine (Aine.OConnor@chg.gov.ie). We'd like to thank [botanical illustrator Margaret Tebbs](http://megtebbs.artweb.com/) [http://megtebbs.artweb.com/] for permission to use her drawing of *Chara tomentosa*, from BSBI Handbook no. 5: Stoneworts, as the logo for this newsletter.



Training at Lough Owel Angling Centre

Two highly successful two-day charophyte ID training courses were held at the Inland Fisheries Ireland (IFI) Lough Owel Angling Centre on the 10th to 13th May. Trainees had the benefit of two experts, Cilian Roden and Nick Stewart, throughout, as well as Jim Ryan on Saturday and Sunday. The courses were very successful, in large measure owing to the hard-working bunch of attendees, but also due to the large efforts put in by teachers and organisers too! Huge thanks to IFI for the venue, to NPWS for the funding, to BSBI for the organising – and especially, to the trainers and everyone who participated.

There's a report [here](#) and below there's a flavour of the feedback we got from attendees:

"Excellent workshop, very well done!"

"I am glad that I went and learned a lot!"

"It was great to have time to look at so many specimens and figure out what we were looking at and attempt to key the species out. Nick and Cilian were so patient with us which was much appreciated. Having the course run over two days allowed (for me!) the information to linger in my head and get processed before the second day so that it felt as if I was building on a base of information on the second day."



Cilian delighted with his specimens! (Ph: Cliona Byrne)



Every one hard at work identifying charophytes



Keying out in the field. (Ph: Maria Long)

Pressing charophyte specimens

Nick Stewart and Cilian Roden demonstrated how to float charophyte specimens onto paper or card at the May training courses. Submerge the paper or card in a tray of water and float the specimen above. The skilled part is gently lifting the paper/card to allow the water, but not the charophyte, to drain off! Cilian recommended higher weight paper or card, while Sylvia Reynolds shared some super tips (available from the [BSBI charophytes webpage](#)) including using card with a shiny surface – such as that used in clothes packaging (e.g. for shirts or nylons).

Place the specimen between newspaper and press as normal. Nick recommends covering the specimen with baking parchment or grease-proof paper, which prevents it sticking to the newspaper while allowing it to dry. Sylvia finds that changing the newspaper after half an hour and frequently thereafter, has the same result.



(With thanks to Seán Wyse Jackson for photos)

Specimens for identification or verification

Nick Stewart and Cilian Roden are happy to accept charophyte specimens for determination or verification.

Send specimens to:

Nick F. Stewart
Bridgepark
New Abbey
Dumfries, DG2 8HH
UK

nfstewart@freeuk.com

Cilian Roden
Doorus
Kinvara
Co. Galway
H91 TF3X

cilianroden@icloud.com

Fresh *Chara* specimens can be posted damp in sealed plastic bags. A Jiffy envelope is advisable. Please wash specimens thoroughly in advance. *Nitella* and *Tolypella* specimens degrade rapidly, so it is best to press specimens for sending (see note on pressing charophytes above).

Please ensure pressed specimens are sent in board-backed envelopes, or otherwise protected.

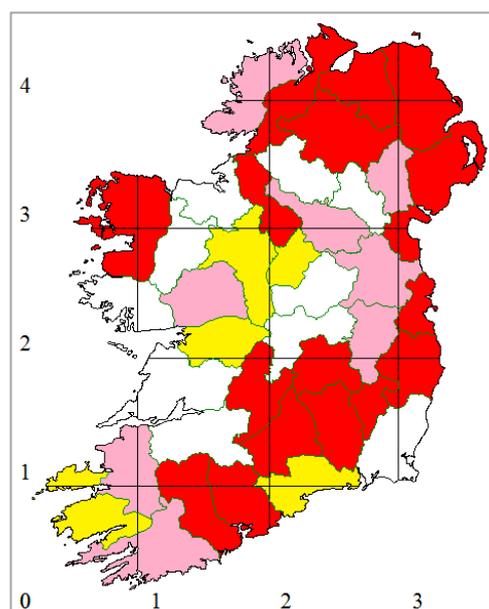
Grappels

Nick Stewart's tips for buying or making your own grappel can be found on the [BSBI charophytes webpage](#).

Charophyte database

In preparation for Atlas 2020 and a new IUCN Regional Red List for Ireland, Nick Stewart has been collating Irish charophyte records from various sources into a central master database. Sources have included existing databases (BRC, CEDaR, BSBI DDb, NBDC and NPWS), herbaria, scientific and 'grey' literature.

The database now contains over 5,500 valid records.



Vice-counties under-recorded since 2000

red = <15% of species-hectad records since 2000,
pink = <25%, yellow = <35%

Nick is currently standardising locality and recorder names. Once this work is complete, the records for each VC will be sent to VCRs for checking. Following VCR validation, the database will be circulated among data centres, where it is hoped it will replace the old datasets.

New (and old) charophyte records are always welcome, with or without voucher specimens. Records can be sent to Nick nfstewart@freeuk.com, ideally using the MS Excel template (available from the [BSBI charophytes webpage](#)).

Please submit records with the level of detail you wish to see displayed on biological map viewers, as the final dataset will be available on-line.

See [here](#) for other Irish red lists, including vascular plants and bryophytes.

Informal charophyte get-together(s)

If anyone has any suggestions – or is willing to lead – a small, informal charophyte get-together later in the season, please contact Maria or Áine. This could take the form of a field excursion or an indoor event, where people can compare specimens and catch-up. So please send us ideas of location, date, or anything else at all, and we can help with the rest.

New records for rare species in the Grand and Royal Canals

After the training courses at Lough Owel, Nick Stewart went in search of two rarities found in the Irish canals - and managed to find both!

Nick found *Nitella tenuissima* at Colgan's Bridge on the Grand Canal, near Edenderry, Co. Offaly. This species has a stronghold on the eastern fringe of the Burren, although a number of populations have not been surveyed for over 20 years. It was also known from Scragh Bog, Co. Westmeath but, unfortunately a search during the training courses found no charophytes at this site. In recent years, several colonies have been located in the Grand and Royal Canals.

Nick found *Tolypella intricata* in the Grand Canal at the Barge Pub, Charlemont Bridge, Dublin 2. This is a spring species that has generally died back by the end of May. It was recorded in the early 1990s in several locations in the Grand and Royal Canals, particularly in the Dublin and eastern Kildare stretches.



Tolypella intricata

Despite extensive searches in the Royal Canal between Phibsboro/Glasnevin and Leixlip, *Tolypella intricata* was not re-found.

It is probable that both species require a level of disturbance to maintain open areas of habitat and, as a result, benefit from canal maintenance works.

Charophytes in the news!

Cilian Roden (described as the snorkelling scientist!) contributed significantly to an excellent article published in the Irish Times on June 7th. You can read it [here](#). It features charophytes, and highlights their importance as indicators of habitat and water quality, but it is also a broader wake-up call about the consequences of the continued intensification of agriculture without taking risks and effects into account. Well worth a read, and let's hope that some of the people who need to hear the message read it too!

And finally...

Please do send in material for this newsletter – no matter how trivial it may seem to you, it will be of interest to charophyte enthusiasts! Send to either Maria (maria.long@bsbi.org) or Áine (aine.oconnor@chg.gov.ie).