



#LoveLincsPlants

Update Report No.5

April 2019 - Sept. 2019



Welcome to the latest edition of our Love Lincs Plants (LLP) project update report. Learn more about what has been achieved so far, upcoming events and opportunities to get involved in this exciting three year National Lottery Heritage Fund project (2017-2020). Thank you National Lottery players! [#ThanksToYou](#).

Love Lincs Plants on BBC One

The project was delighted to feature on BBC One's Countryfile on the 14th July. Hosted by Margherita Taylor (*left, with project officer Aidan Neary*), the episode covered the conservation and cultural importance of Lincolnshire's Critically Endangered Tall Thrift (*bottom right*) while acknowledging the legacy of Sir Joseph Banks and his influence on the world of botany and herbaria. The feature captured the herbarium process at the Sir Joseph Banks Society centre (SJBS) in Horncastle as well as demonstrating the plant collection process with Margherita collecting specimens of Oxeye Daisy, also known as 'Marguerite', for the contemporary collection (*bottom left*). With an estimated audience of approximately four million viewers, the episode provided a national platform to raise the profile of the project and the contemporary role of herbaria.

"It was a pleasure to tell the story of your project to our viewers. Such an amazing project that I am sure will leave a legacy for the next generation of botanists."

(Margherita Taylor, BBC Countryfile presenter).

NHM train students at the University of Lincoln

In early May, NHM project officer Kath Castillo delivered an enthusiastically received specimen mounting 'drop in' session at the University of Lincoln's Minerva Building in order to extend the reach of the project within the wider university community. Over a four hour period a total of 14 students tried their hand at mounting contemporary Lincolnshire herbarium specimens; writing their name into local history! Trainees from the Conservation of Cultural Heritage degree course as well as Animal Behaviour and the Arts relished the opportunity to work with NHM staff on campus and are keen to do more at the Sir Joseph Banks Centre in Horncastle.



"This has made my day—it was a fun way to start the day. I am very happy with my specimen being added to the contemporary collection. Thank You!" (Lucy Boulton. 2nd Year Animal Behaviour student at the University of Lincoln.)



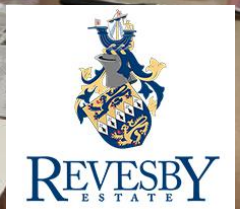
"Today was a brilliant opportunity to promote and explore the intersection between Art & Nature and the possibilities that arise in working together. It was also great to see multi-generation families from the Syrian community experiencing and exploring Whisby Nature Park for the first time!"

(Rachel Long, Creative Producer at Mansions of the Future.)

Existing volunteers passing on skills to Revesby Estate volunteers

Building on our initial project talk to the Revesby Estate community in February, project staff and volunteers were invited back to deliver an introduction to plant mounting for new local volunteers in June. Over the course of the day, ten volunteers were briefed on the collection process and the value of herbaria and then allowed to cut their teeth on some practice specimens. By the end of the day a total of 10 new specimens were added to the collection. It was fantastic to carry on the traditional skill of herbaria conservation within the grounds of Sir Joseph Banks' ancestral home, but also encouraging to see three existing Sir Joseph Banks centre herbarium volunteers passing on their skills to new volunteers.

(Right: Barbara Shepherd passing on her new skills)



Public events & training

Over the spring and summer the project has been reaching out to new audiences with a series of public engagement events. As a homage to [Sir Joseph Banks fishing excursions](#) on the River Witham we chartered the [Boston Belle](#) passenger boat from Boston to Anton's Gowt on the 30th May to collect specimens along the Witham Way Local Wildlife Site (*top left*). It was great to meet new volunteers from the local area and to see some of our young LLP botanists putting their new skills into action. Our Community and Education Officer, Sue Fysh has also been working with the Syrian community in Lincoln; hosting a Wilderness Day in partnership with [Mansions of the Future](#) arts and culture project at Whisby Nature Park. Inner city children (*middle left*) and families had the opportunity to relax in nature; working with natural materials to make fabrics and pendants. Sue and LWT staff have also been out across the county, training over 70 adults and children in plant identification and collection from Far Ings National Nature Reserve to Cleethorpes Country Park, The Isle of Axholme and Willow Tree Fen near Bourne. Combined with the Trust's annual Lincs Show Marquee event in June; demonstrating the art of herbaria at the National Bird Fair at Rutland in August; as well as talks from NHM curator Fred Rumsey (*bottom left*) and Paul Scott (SJBS) as part of September's [Heritage Open Day](#), the project has delivered a total of 72 public events to date; reaching put to over 6000 members of the public since April .

Young Botanist weekends

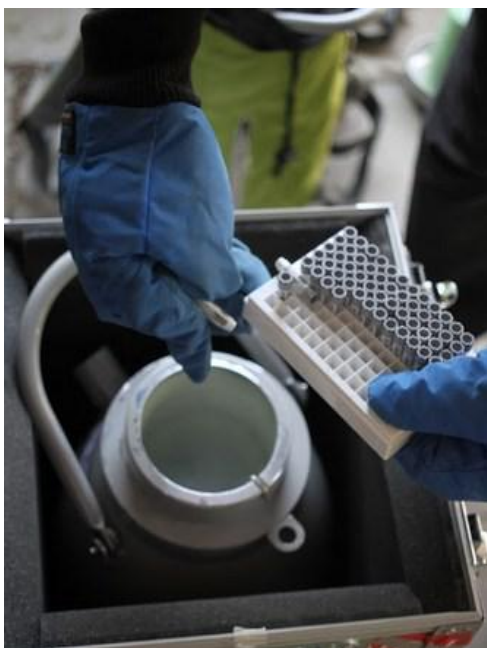
The project has successfully delivered two residential botany weekend sessions at Claxby Viking Centre this season. Renowned woodland ecology expert, Dr Keith Kirby of Oxford University (*bottom left*) delivered a woodland ecology and ancient woodland flora session to twelve enthusiastic 18-35 year old beginner botanists; using Claxby ancient woodland as a field site. This was followed by a meadow flora weekend in at Kingerby Beck Meadows SSS in July. Over the course of three days, trainees received several lectures including 'An introduction to grassland ecology', 'Grassland survey methods' and 'Love Lincs Plants and Herbaria as scientific research tool'. This was complimented by several practical field sessions within a species rich meadow managed by Lincolnshire Wildlife Trust. Field sessions included quadrat surveying and herbarium and DNA collection for the contemporary collection (*bottom right*) as well as common grass species identification using botanical keys. Trainees were also introduced to herbarium specimen mounting techniques adding eleven new specimens to the collection (*top*).

For more information on our 18-35 sessions click [here](#).



Lorna Beattie
@LornaBeattie1

"Had an amazing weekend with @LoveLincsPlants learning all about flower-rich grasslands. Met some fab people, finally learnt how to key out plants and spent a lot of time in a field." (Tweet, July 2019)



NHM August field trip: Using liquid nitrogen for preserving DNA samples & smartphone app development.

The core NHM project team together with Michelle Casanova, a charophytes (green algae) expert, visited four sites over four days in Lincolnshire in late August. With a focus on aquatics, the team visited LWT sites at Gibraltar Point, Baston Fen, and freshwater lakes at Whisby Nature Park. A total of 71 specimens of flowering plants, algae and ferns, which included 27 duplicates for the SJBS herbarium were collected. As a project first, DNA was collected in vials for 40 specimens, recorded and immediately stored in the liquid N₂ in the field (*image left*) as well as standard DNA leaf tissue samples using silica gel. DNA quality comparison studies are now underway for these two DNA collection methods and may shape how the herbarium community continue to collect DNA samples in the future.

During this field work, one species discovered at Gibraltar Point, *Chara canescens*, has not been recorded in Lincs and is previously listed as Critically Endangered in the British Isles. A report on the Charophytes, with reference to the historic collections, is in preparation.

Continuing with the spirit of innovation, the NHM development team have taken up the challenge of developing a Herbarium Collection smart phone app as an alternative to using paper recording forms in the field. This has been thoroughly tested and will be trialled at Lincolnshire collection events in 2020. An exciting technological legacy for the project!

Permission to collect on SSSIs until 2022

In early May the project team were delighted to receive permission to collect specimens from Sites of Special Scientific Interest (SSSI) from both the East Midlands and Yorkshire and Humber Natural England teams (*right*). The consent period will extend beyond the life of the project until April 2022 and as a result will help to establish the long term development of our Lincolnshire contemporary herbarium; allowing project partners to embed the collection process into their work. The consent includes 52 SSSIs managed by the Lincolnshire Wildlife Trust (LWT) as well as 9 SSSIs managed by Forestry England within the Bardney Lime Woods Special Area of Conservation; 6 Lincolnshire County Council SSSI Roadside Nature Reserves and two SSSI units within the Humber Estuary owned by North East Lincolnshire Council.

Combined with these SSSI sites, the project can now collect plant specimens from 150 sites across Greater Lincolnshire. We would like to take this opportunity to thank all of our private and public landowners such as Dyson Beeswax estate, The Environment Agency and several local authorities and farmers for supporting the project; allowing volunteers to collect specimens from some of the counties wildest habitats for the benefit of botanical research and cultural heritage.

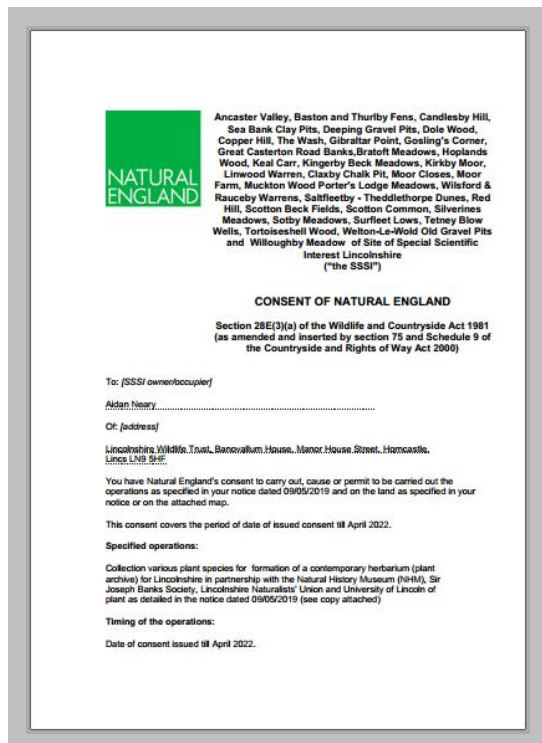


Open University Santander placements

The Lincolnshire Wildlife Trust continue to develop the skills of the next generation with their 10 week Open University Santander Placements. Over the summer, Open University undergraduates Catherine Watson and long term LWT volunteer Simon Winter (*right*) have been immersed in the work of the Trust; from shadowing wildlife sites officer Jeremy Fraser on botanical surveys; working together to produce a meadow management plan; composing a blog for the Trust's website as well developing public engagement skills during the county wide Heritage Open Days in September. Both Catherine and Simon have also delivered key tasks for the Love Lincs Plants project; collecting Inspirational Plants; assisting NHM staff in their August field trip as well as drafting initial designs and costings for our botanical raised beds at Banovallum House. Through Simon's voluntary work and initial contact with the project at the 2018 Field Identification Skills Certificate (FISC) session it is satisfying to see how young students are getting the opportunity to progress their skills in a professional environment. We wish both Catherine and Simon well for the future!

"My placement with LWT has allowed me to work alongside experts from the Natural History Museum identifying and collecting plants for the #LoveLincsPlants project. I have learnt so much and enjoyed every moment of it." (Catherine Watson)

"The last 10 weeks have been a fantastic experience. It's proved a fascinating, inspirational and enjoyable insight into all elements of LWT's vital work. Everyone has made me feel so welcome and taken time out to help with my development." (Simon Winter)



2020 support from the South Lincs Flora Group (SLFG)

Sarah Lambert and the South Lincs Flora Group have continued to support the project in 2019; organising 5 collection and recording sessions within Vice County 53. This has included a thorny session of bramble collection at Bourne Woods with Natural England's Alex Prendergast: Collecting DNA for the first time for NHM's microbiology unit. New project volunteers, trained in specimen mounting are now taking part in plant collection with the group and are enjoying experiencing the whole herbarium process from start to finish. We look forward to working with them in 2020.



Schools, Wildlife Watch and education engagement

Community and Education Officer, Sue Fysh and Lincolnshire Wildlife Trust education staff at Far Ings, Gibraltar Point, Skegness and Whisby Education Centre have been delivering fun and engaging plant themed sessions to primary and secondary school children from across the county.

Over the last six months a total of 1,080 primary school children have been engaged through inspirational plant themed assemblies, plant hunter explorer sessions or botany inspired arts and crafts activities (*bottom right, words inspired by nature*). A further 412 GSCE and Secondary school children from Boston Academy, William Farr CoE in Welton, The Kings' School in Grantham and Sutton Academy have had the opportunity to get to grips with plant identification and survey techniques in sand dune, saltmarsh and lake habitats.

Following on from a successful Wildlife Watch leaders training session back in March, Watch groups have been working independently with their new herbarium collection packs to collect specimens for the contemporary collection as well as their group herbarium folder (*Top images — Bardney Limewoods Watch session in May*). Over the last six months, 70 Watch children aged 6 to 14 have had an opportunity to learn how to identify, collect and press specimens.

Well done to the LWT education team for nurturing the next generation of Lincolnshire botanists!



"As a great introduction to Class 3's plant-based term six rainforest topic, we recently had a plant-explorer session (as did years 1 and 2) run by Lincolnshire Wildlife Trust. Not only did the children collect and identify species of plants, but they also learned how plant DNA samples are taken and began to prepare herbarium specimens (just like real botanists do). Thank-you to all our parent helpers and #LoveLincsPlants visitors for running these two sessions." (Allington with Sedgebrook CoE Primary School) ,

Events and Media Stats

Approx 4 Million people engaged with project on BBC One's Countryfile show

Over 200 x 18-35 year olds introduced to plant ID, collection or mounting to date

Over 100 Wildlife Watch children trained in plant collection to date

285 project events delivered to date

Stats & media update

The project continues to raise the profile of botany, herbaria, and the Heritage Fund through social media and local radio. LWT Communication Officer Rachel Shaw used our first set of Inspirational Plants live on air to engage listeners of BBC Radio Lincolnshire's morning show with Amy Claridge on the 16th April, inspiring 60,000 Lincolnshire listeners on their drive into work.

All project partners are now actively using Twitter to share project events and to promote the work of our volunteers using #LoveLincsPlants. Recent international project followers include the National Herbaria of Rwanda and the State Darwin Museum in Moscow.

News from partners.



3,893 Historic Specimens databased at the Natural History Museum

With a dedicated group of core volunteers led by NHM technician Debra Turner, the LNU Historic Collection now totals at 3,893 databased specimens. This work includes several important new records made through previously partially identified material in the Joan Gibbons collection. Debra has also produced reports for several discrete units within the collections, most recently on plant galls (*Images bottom left*) and are available to view on the LNU website [here](#). The historic gall collection has been reviewed and nomenclature updated by members of the British Plant Gall Society volunteering at the NHM.

NHM Project Officer Kath Castillo continues to work on databasing, mounting and digitisation of the first batch of contemporary Lincolnshire specimens with volunteers, with a view to digitising the first set of Inspirational Plants in the coming weeks. A further 200 specimens will be delivered to NHM over the autumn. Kath also successfully delivered a series of plant mounting and curation training days to existing and new volunteers in early May; providing curation advice and feedback on mounting to core volunteers at the Sir Joseph Banks Society (*image top left*). Planning for 2020 NHM training sessions in Lincolnshire is underway and will be announced on the [project webpage](#) over the winter.

To view the NHM historic and contemporary collection stored within the British and Irish Herbarium at the museum click here: [NHM data portal](#).

Lincolnshire Naturalists' Union (LNU) by Nick Tribe

2019 has been a busy collecting period for the LNU. The summer programme has incorporated specimen collection at all field visits this year, with an extra visit to collect the rare sub-species of the ancient woodland plant Yellow Archangel that only occurs in Lincolnshire within the UK (*Image bottom left*)

The Union's eight field meetings commenced with the ancient woodland site of Osgodby Coppice in the south of the county in April. The Union has collected in habitats as diverse as wetlands, urban parklands, cemeteries, old meadows and pasture and newly created habitats on former sand and gravel quarries and newly planted woodlands. To make collecting for Love Lincs Plants easier and less rushed, the June, July and August field meetings have commenced at 10 am rather than the usual 1am. This has allowed the Union to collect up to 40 specimens (20 species) rather than the usual 20 (10 species). Engagement with non-LNU members who have attended the field meeting to help collect for Love Lincs Plants has been good with 12 people collecting at the meetings. The Union will continue to collect at the October field meeting at Moor Farm if suitable species available.

The feedback from NHM is that the quality of the specimens collected at the field meetings has been to NHM's 'Gold' standard! We look forward to planning the 2020 collection season over the winter and adding more specimens to the collection. To join in with LNU collection events go to our [website](#).

"Both Kath's and Aidan's ongoing support and feedback has helped us to grow in confidence. Mounting specimens has become addictive!"
(Margaret Bateson: Sir Joseph Banks Centre Herbarium volunteer)



Top: Field meeting at Ashing Lane Nature Reserve, nr, Lincoln. **Bottom left:** Collecting sub species of Yellow Archangel. **Bottom right:** Young botanists and new volunteers taking part in collection and pressing at Boston Cemetery.

News from partners

This Spring and Summer period has seen the Love Lincolnshire Plants herbarium specimens increase considerably with 444 specimens data logged and over 200 in the process chain. As these specimens flow through our volunteers and staff are developing their skills in herbarium management commensurately.

As a result of the LLP project the Society has had the confidence to engage two BA (Hons) Conservation of Cultural Heritage undergraduate students from Lincoln University (*Right: Student Roksana Drobinoga data logging*) to work on our other historic herbarium, the Seaward collection, which includes 800 UK and international plant specimens dating back from the Victorian era to the 1990's. This skills development and knowledge acquisition will prove invaluable in post project herbarium curation, and will enable the partners to continue collecting for many years to come.

Over the summer, the Society have been busy with tourist visits to the centre and our shops, together with organised trips from groups and clubs. The Society also operate Horncastle's tourist information centre and are using this service to promote the subject of botany and our partnership role with the project.

Highlights of the year have been the two days filming for both BBC Countryfile (*Right: Paul Scott with Margherita Taylor in the Banks' Tribute Garden*) and Channel 5. Together, these have enabled us to reach national audiences and have been great experiences for our volunteers and staff.

Our largest local event in terms of footfall was the two-day Heckington show. Trustees engaged with over 200 hundred visitors to the marquee, learning about Sir Joseph Banks in Lincolnshire, our work with volunteers and the two herbarium collections under our stewardship.

The society is also busy planning next years 2020 bicentenary events marking Sir Joseph Banks death. Confirmed events include a reception at The House of Lords, a one day seminar at Erasmus Darwin House in Litchfield, British Science Week in March as well as summer shows at Heckington and Bank's ancestral home, the Revesby Estate in August. The Society is also looking forward to welcoming the Bishop of Vanuatu in 2020 and developing our ongoing relationship established through the Vanuatu Island appeal fund that the Society continue to support.

To view the LLP herbarium online and find out more about our 2019/2020 programme of talks and Banks bicentenary events go to the [Society's website](#).

Sir Joseph Banks Society

by Paul Scott (SJBS Trustee)



NHM's Kath Castillo at the University of Lincoln

The BSc Ecology and Conservation degree programme at the University of Lincoln currently is in its second year, with 14 students enrolled in the first year and 10 in second year. Students have been building their field skills through continued interactions with the Love Lincs Plants project. Throughout their first year, students will have opportunities to interact with project staff, through plant ID sessions, as well as visits to field sites and to the Sir Joseph Banks Herbarium in Horncastle to learn about and participate in specimen mounting. More broadly, the Love Lincs Plants project will join our annual spring plant hunting and ID-blitz day for 120 first year

students across multiple programmes (BSc Zoology, BSc Biology, BSc Ecology and Conservation) at the University's Riseholme Campus. The 'drop-in' plant specimen mounting session in May with Kath Castillo of the NHM hosted in the Minerva Building attracted a high footfall of staff and students from across the University. The success of spring 2019's mounting session, has meant a second session is planned for November 2019 with Lincolnshire Wildlife Trust staff.

FISC - 2nd year in Lincolnshire

In partnership with the Natural England Field Unit team in Norwich and Botanical Society of Britain and Ireland the project delivered another successful Field Identification Skills Certificate (FISC) for a second year running in early July. As part of an 'in-kind' agreement with assessment partners, a total of 7 Lincolnshire Young Botanists (*right*) within the 18 to 35 training programme were given a free FISC assessment in botanical identification for the first time to help assess their current skill level. A further 7, fee paying ecologists and naturalists from around the UK attended a second session. Both sessions were held in Horncastle Community Centre and Shearman's Wath Local Wildlife Site over the two days. Based on feedback from attendees this year a weekend FISC is under development for the south of the county in 2020 to increase attendance. To find out more about the FISC assessment click [here](#).



"I enjoyed learning about the various plant species and feel like I am leaving today with a greater knowledge of plant species. I enjoyed putting my skills to the test in the field; it's a fab chance to test the skills further." Katrine (18-35 FISC)

Lottery #ThanksToYou and 25 year anniversary



The National Lottery is celebrating its 25 year anniversary this autumn and will be tying in celebrations with their annual #ThanksToYou campaign from the 23rd November to the 1st December 2019. Since its launch in 1994 the Lincolnshire Wildlife Trust have received funding for 20 Lottery projects and it is important to remember that the Love Lincs Plants project would not be possible without the support of the Heritage Fund and lottery players. To say thank you we are running a free drop in plant mounting and craft session at the University of Lincoln's Atrium building on Wednesday 27th November. To find out more about this event and other #ThanksToYou events in your area go to the Heritage Fund website here: [Lottery Good Causes](#).

Upcoming events and training in 2019

- Moor Farm plant collection with the LNU - 13th October 2019 - Last one of the year! LNU [website](#).
 - Herbarium processing at the Sir Joseph Banks Centre, Horncastle - 23rd October 2019
- 18-35 volunteers: Herbarium Processing at the Sir Joseph Banks Centre, Horncastle - 26th October 2019
 - Talk on Sir Joseph Banks from the Sir Joseph Banks Society, Dower House, Woodhall Spa. 30th November 2019, 12-2pm.
- National Lottery #Thanks To You event: University of Lincoln herbarium mounting drop in session - 27th November 2019, 10:30am-3pm. Atrium building, Lincoln campus.

Want to find out more? For further information about the events, workshops and training sessions mentioned in this report follow us on Twitter [@LoveLincsPlants](#) and on [Facebook](#). Further project information can be found on the project website. Click [here](#).

