



#LoveLincsPlants

Quarterly Report April 2018 - Sept.2018

Welcome to the Spring-Summer 2018 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 Heritage Lottery Fund Project. Thank you National Lottery players!

EU Researchers' Night: NHM London, Sept. 2018

Project staff from LWT and the NHM presented the project at the European Researchers' Night, an annual public event hosted by the Museum attracting approximately 5000 visitors, celebrating European scientific research. This year's theme, 'Planet 2.0' highlighted how human activity has fundamentally changed the Earth and how scientists can use resources such as herbarium specimens to help understand and address the human impacts of climate change and habitat destruction. (see page 2).



On herbaria: *"As part of my school biology course at home in Germany we have been asked to create our own mini herbarium from our garden or local park. I've loved using creative and scientific skills together and it's great to see it being done on a professional scientific level here in England."*

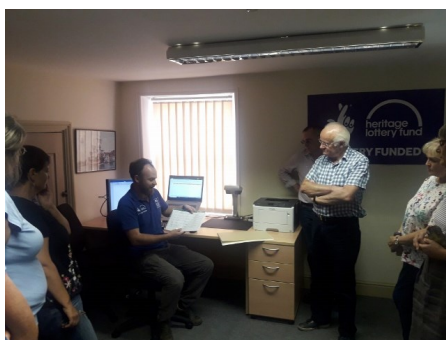
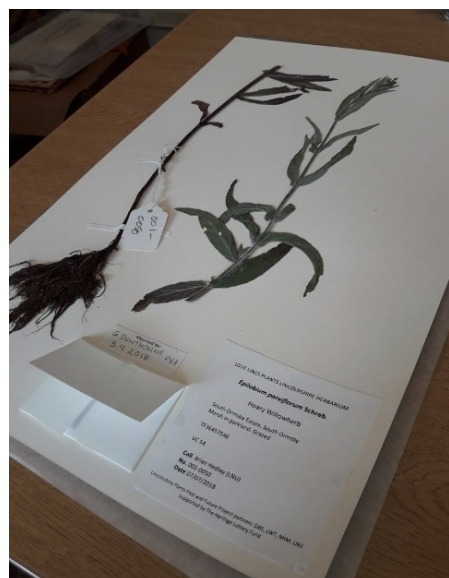
Mia, Cologne

On macro photography: *"If you want to engage young people in botany, this is the way to do it!"* **Matthew, undergraduate student in London**



Lincolnshire Herbarium takes shape

Throughout the exceptionally dry summer of 2018 we have been working through the heat to collect specimens for the new Lincolnshire Herbarium to be archived at the Sir Joseph Banks Centre in Horncastle and the Natural History Museum in London. Over 30 volunteers from several groups including the Lincolnshire Naturalists' Union, The South Lincs Flora Group (top left), Groundwork Youth and Liquorice Park residents in Lincoln have helped to collect 200 specimens from across the county. The first batch of dry specimens have been mounted following expert training from NHM project officer, Kath Castillo in September (top right). This was followed by a trip to The Sir Joseph Banks Centre in Horncastle to view the new Herbarium cabinets, mounting stations, and processing equipment (bottom right) where our enthusiastic volunteers will create a fantastic record of our Lincolnshire flora for the future.



**Funding raised by
The National Lottery**
and awarded by the Heritage Lottery Fund



*"Loved the plant mounting session.
Inspirational and infectious."*

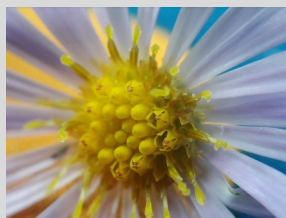
A big wow! A big thank you! Debbie Lincoln

Events & training

It has been a busy spring and summer of events; getting underway with two NHM specimen collection training sessions in April at Whisby Ed. Centre. To date, a total of 44 trainees have been trained by NHM staff in plant specimen & DNA collection, recording data, and how to use a plant press and plant drying units (top left).

As part of wider project engagement with the general public, project staff from NHM, LNU and Sir Joseph Banks Society came together to celebrate plants at The Lincolnshire Show in June; providing an opportunity to discover the hidden world of botany through macro photography (middle right) and learning traditional plant mounting skills with the Natural History Museum (top right).

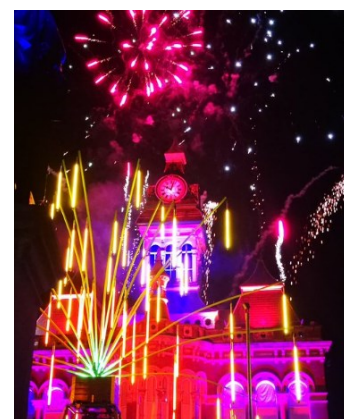
Other highlights included partnership working with the South Ormsby Estate in the Lincolnshire Wolds to deliver a botanical notebook workshop with Lincoln artist Laura Andrew in July (bottom left). Five trainees learned how to sketch plants quickly in the field and how to work these up into full watercolour sketches back in the studio. Over the August Bank Holiday weekend project staff inspired young children and adults with rush plaiting and macro photography (middle left & right) while also recruiting new volunteers for specimen mounting.



Gravity Fields Festival and EU Researchers' Night September 2018

Project staff were excited to be involved with the Grantham based [Gravity Fields](#) Festival (right) for the first time this September. Over three days, the team used our first set of Inspirational Plants and macro photography to inspire over 400 members of the public and four local secondary schools (166 pupils) at the Science Exhibition. This 'festival of science' was also attended by project partners from NHM and the University of Lincoln with museum curators Fred Rumsey and Mark Carine (top left) delivering an engaging talk on Sir Joseph Banks' exploration of Madeira in 1768 during the Endeavour voyage while Professor Libby John from the University highlighted Bank's legacy and how we can support the next generation of young botanists through the LLP project. We're already looking forward to the next celebration in 2020!

During the EU researchers' night (bottom), project staff were able to have in-depth conversations with 140 members of the public. This included a high percentage (70%) of academics and college students under 35 who were largely aware of the role of herbaria but were intrigued to see our presence in London and how several regional partners are working together to produce a county herbarium. Again, the macro photography and Inspirational Plants proved to be valuable engagement tools to kick start interest and conversation.



Young botanists (18-35) sessions

Following on from the first 18-35 training session (winter trees) in February, a further five sessions have been delivered in 2018. This has included herbarium specimen collection, beginners botany and an introduction to grasses, meadow flora, heathland indicators and trees in leaf. These have been led by NHM, project and Trust staff and guest experts such as Neil Pike from Natural England (top right).

Sixteen 18-35 year olds have attended training or assessment sessions so far with 50 trainees registering an interest, however, attendance has been variable. To enhance the course programme we are contacting all trainees to investigate possible barriers preventing attendance such as travel, time of week or season. In 2019-20 we also hope to deliver sessions with qualified Field Studies Council (FSC) lecturers to raise the profile of the programme.



*"You learn a lot more, a lot quicker and about a broader range of topics by having a structured taught course of actual training compared to volunteering/shadowing a botanist (which are both great learning tools as well, but I think must work better in combination with formal training focusing on specific topics at a time). In most cases this sort of training comes with a hefty price tag, so free is amazing!At the start of the course, having recently graduated from university, I was volunteering, so the fact that this course is free and local was a huge benefit. The skills I have learnt have helped me gain paid employment with an ecological consultancy!" **Sally Bavin, trainee ecologist.***



First Lincolnshire Field Identification Skills Certificate (FISC)

The project was proud to deliver the first FISC assessment in Lincolnshire in July. This is a highly regarded qualification within the ecological and conservation sector and aims to address the lack of a reliable method for assessing botanical identification skills. Led by Natural England advisors Alex Prendergast and John Martyn in partnership with the Botanical Society of Britain and Ireland (BSBI), 14 Lincolnshire botanists were tested with a morning lab session identifying cut specimens (top left) ranging from 'common' to more challenging species. This was followed by an afternoon site walk over to collate a species list (left). Attendees were subsequently awarded a skill level based on the BSBI Botanical Skills Pyramid. This has given 3 experienced botanists the confidence to lead wildflower walks for beginners in 2019 with the remainder volunteering to take part in plant collection for the new herbarium.

"Thank you for giving me the opportunity to finally attend a FISC assessment session here in Lincolnshire. I would be more than happy to lead a saltmarsh botanical identification work for the project and will continue to help with plant collection activities with the South Lincs Flora Group in 2019".

Louise Denning, Lead Advisor. Natural England

Plant collection

Despite of the long winter and shorter flowering period induced by the dry summer, a total of 12 plant collection events have taken place across Lincolnshire. Both the South Lincs Flora Group and Lincolnshire Naturalists Union (far right) have coordinated four sessions each, with further collections with the Whisby and Coningsby Wildlife Watch Groups (bottom) and Liquorice Park in Lincoln. The project has also worked with Groundwork Youth for the first time through one of the projects' 18-35 year old botanists, Sally Bavin. Volunteering as a 'Young Green Ambassador' for Groundwork's Inclusive Spaces campaign, Sally coordinated a 'pop-up' collection at Riseholme Country Park in Lincoln (top left). The campaign aims to try and get more young people to volunteer in green spaces and from this partnership working it has been possible to recruit more young botanists into the 18-35 training programme.

South Lincs Flora Group (SLFG)

The project has been fortunate to gain the support of the South Lincs Flora Group (SLFG). This group of skilled volunteer botanical recorders in South Lincolnshire (Vice County 53) have organised four collection sessions so far. As well as recording for the BSBI 2020 Atlas, volunteers have helped to identify and collect over 100 specimens. Collections have focussed on species that are more challenging to identify, particularly grasses and sedges. In July, eight volunteers visited Willow Tree Fen near Bourne to hunt for wetland and fenland specialities. This included tackling the very large and very prickly Milk Thistle which required leather gauntlets to handle! Group coordinator, Sarah Lambert (right) has also volunteered to dry and process SLFG specimens, commenting " *I have really loved using the drying cabinet and seeing the end product*". More SLFG collection events are planned for 2019 so please visit www.southlincsfloragroup.wordpress.com for details.



Developing

Banovallum House Flora

Despite of the dry weather, work has continued with the development of the Banovallum House wildlife garden. [Lincoln Conservation Group](#) volunteers (left) put their new scything skills and equipment to the test acquired through the Trust's previous HLF funded Meadow Network Project (2014-17). Ten volunteers carried out the annual meadow

hay cut with Austrian scythes. This is helping to maintain plant diversity in this mini meadow demonstration plot. Wildflower propagation volunteers have also continued to support the work of the Trust and have provided over 200 Lincolnshire wildflowers of local provenance for new habitat beds to be developed over the autumn months both at Banovallum House and at Whisby Education Centre. These will provide general plant enthusiasts, conservation managers and students an opportunity to learn about plant indicator species and limestone grassland and heathland ecology in an urban and accessible setting.

Schools and engagement

To date, thirty two plant themed education sessions have been delivered by Education and Community Officers, Sue and Kevin, with local primary schools, Whisby Nature Tots (under 5's) Wildlife Watch (5-12) and A-level biology students in the county. Budding botanists have been introduced to the world of plants through bug hunting; investigating how insects use different layers of vegetation and specific food plants. Other sessions included plant collection and pressing, making craft objects such as bookmarks made from woven rushes (far right), mini-models of flower parts and plant art.



Training/Events Statistics to date.

44 adults received plant collection training by NHM

32 education sessions with schools, Wildlife Watch, colleges and the University of Lincoln

16 individual 18-35 year olds attended training

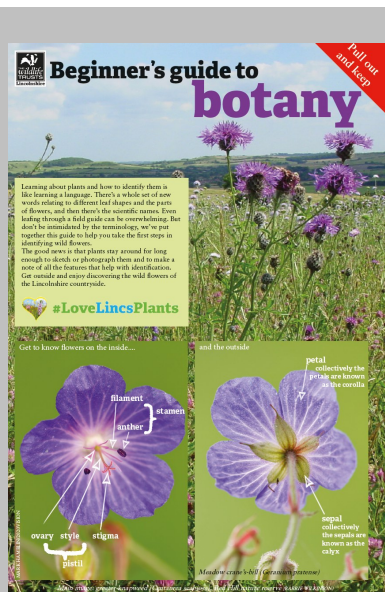
4000 people engaged at open public events

Media update

Twitter continues to prove to be a vital tool for promoting project events, training opportunities as well as a visual outlet for inspiring the wider public about our native flora and the work of project partners. LLP is currently being followed by the [Royal Botanic Gardens in Edinburgh](#), the [Botany Department at Manchester Museum](#) and researchers from Saudi Arabia, [San Francisco](#) and the [Latin American Botanical Association](#). In August, Whisby Wildlife Watch member, Elizabeth (left) featured in the 'Top Tweet' of the month, reaching out to over 5,000 people as she displayed her new specimen recording skills.

In May both Fred Rumsey (NHM) and project officer Aidan Neary spoke to Sue Taylor from BBC Radio Lincolnshire's Nature Show ([Listen here:](#)); highlighting to an audience of 70,000 listeners across Lincolnshire the importance of herbaria for scientific study and how the project is engaging with young botanists. As part of Celebrating Lincolnshire Day Education and community officer, Sue Fysh (left) spoke to Melvyn Prior, presenter of the Morning Show; helping to raise awareness of the project and how people can take part in plant collection activities and mounting specimens in 2019.

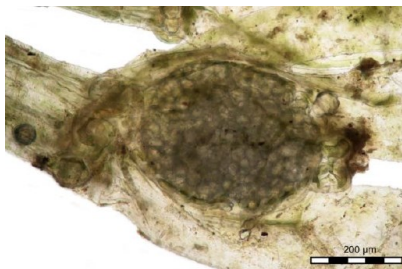
The Lincolnshire Wildlife Trust continue to promote the project through social media and also through its tri-annual 'Lapwings' publication; reaching out to 28,000 members. The 2018 Summer edition featured a 4 page 'Beginners guide to botany' pull out (top right) to help naturalists take their first steps into plant identification.



**BBC RADIO
LINCOLNSHIRE**

News from partners.

1000th Historic Specimen at NHM



Project staff and London based volunteers at the Natural History Museum continue to delve in to the LNU Lincolnshire Historic collection. So far, volunteers have contributed twenty seven volunteer days in order to database 1,016 specimens. From these, a total of 700 specimens have been fully processed i.e. databased, verified, mounted and captured digitally. In early September, the NHM team reached the milestone of 1000 databased specimens; archiving former LNU president Joan Gibbons' specimen of Common Lady-fern (far left) collected in a Raspberry plantation in Moortown in 1957.

NHM Herbarium technician, Debra Turner, has also worked with a NHM Masters student to process

fifty two algae specimens from Woodruffe-Peacock's Algae collection (1883-1918). Using a camera-mounted microscope and focus-stacking software (above) the team were able to determine the species and capture detailed diagnostic images. These records are now available to the public on the museum's online data portal.

Lincolnshire Naturalists' Union (LNU) by Chris Manning

A busy summer of [LNU](#) field meetings with four plant collection events completed to date. Our inaugural plant collection/ recording meeting in May at Greetwell Hollow reserve in Lincoln proved to be a successful initial trial; collecting a total 20 specimens. LNU members quickly got to grips with the recording form, plant press and GPS (smart phone) and put these skills to use with a further three collection sessions completed over the summer at Shearman's Wath in West Ashby (top right), The South Ormsby Estate and Raithby Beck Wood in the Lincolnshire Wolds. So far the LNU have targeted more challenging to identify species; collecting a total of 80 specimens (40 species) across a diverse range of habitats such as mature parkland, limestone grassland and wetlands.

It was also great to see long term LNU members being joined by young naturalists (bottom right). Collecting for the new herbarium added an extra dimension to our regular field meetings, and may have contributed to a very good average turn out of 20 attendees over the summer. We feel LLP has enticed naturalists to develop their botany ID skills while at the same time learning new practical herbarium skills.

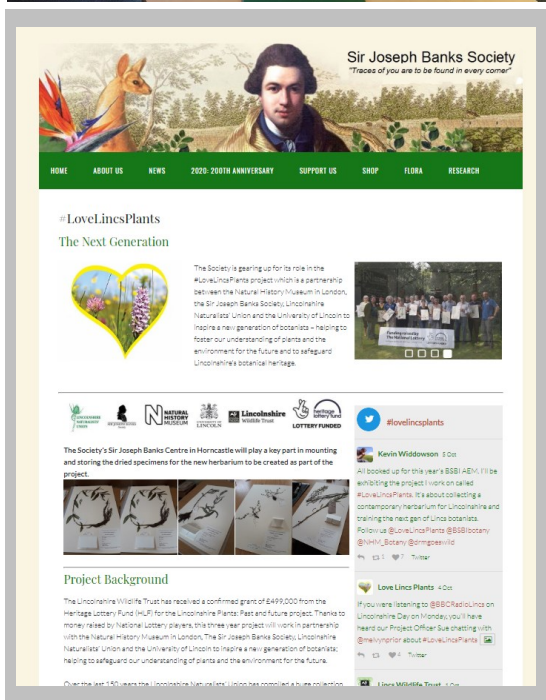
The collection and drying process has been successfully integrated into field meeting excursions with field meeting coordinator, Brian Hedley (bottom left), volunteering to dry LNU specimens at home and delivering dry specimen batches to the Sir Joseph Banks Centre for mounting. Feedback has been positive from curators at the Natural History Museum who are delighted with the quality of the specimens and their presentation. The executive committee are now planning the winter programme with an increasing focus on botany while synchronizing with other partners the availability and demands on speakers.

"It was exciting to find examples of some of these specimens in the Peacock collection, providing an historical record of their presence in the calcareous fens and ditches of Lincolnshire at the turn of the 20th Century. This give us an indication of the water quality at the time"

Debra Turner LLP Herbarium Technician



News from partners



staff: helping to develop botanical ID skills as well as niche herbarium collection skills. Further to this, students will have the opportunity to work with digital media to develop communication and technology skills as they will be tasked to produce a series of short 'How to ID' videos to be hosted on the Trust's website as part of the learning legacy.

Project staff will be kicking off this exciting relationship with the School of Life Sciences and new BSc Ecology Students on 10th October at the annual Uni Bioblitz.

Sir Joseph Banks Society

by Jean Shaftoe (SJBS Chairman)

The Sir Joseph Banks Society's Study Room (middle left) has been a hive of activity over the past couple of months. Equipment and furniture has been arriving so that mounting of specimens can commence during the autumn. Cabinets, desks, chairs and specialist herbarium paper, glue and capsules for seeds and samples are filling the room. With our recently improved [Society website](#) (below left) we're ready for volunteers to start work on processing the new herbarium over the autumn and winter.

To get things started, an initial training session with Kath Castillo from the Natural History Museum was organised for 17 volunteers on the 3rd September. We assembled at Banovallum House in Horncastle and spent the morning learning how to professionally mount specimens. It was interesting to learn how to incorporate extra plant material such as seed heads in small envelopes called capsules, where to position the specimen label and when to use glue and strapping when mounting. This will ensure that our mounted material conforms with professional standards. After picnicking in the garden at Banovallum House we took a short walk to visit the new herbarium at the Sir Joseph Banks Centre in the town. As society chairman it was a pleasure to provide a brief welcome and introduction to the society to the volunteers in our Banks Tribute Garden. This was followed by tour of the new herbarium processing room to see the new mounting stations, cabinets, laptop and scanner. Project officer, Aidan Neary, introduced volunteers to the specimen processing method and equipment and enticed us with more detailed workshops to be held at the centre in November.

The Society were also delighted to welcome Professor Libby John from the University of Lincoln as our new president in spring this year. Libby was instrumental in the development of the Sir Joseph Banks Laboratory at the university as well as the development of the new BSc in Ecology & Conservation starting in October this year. Her passion for Banks and young botanists was clear to see at her recent talk to a packed auditorium at the Gravity Fields Festival and we look forward to working with her into the future.

University of Lincoln

Education and Community Officer, Kevin Widdowson played a key role in supporting the Universities' annual introduction to botany sessions with existing life sciences students in April. Delivered at the Universities' Riseholme campus (below) over two days a total **132** students explored campus woodland and grassland flora while getting to grips with botanical features, terminology, using botanical keys.

In anticipation of the start of the new [BSc in Ecology & Conservation](#) LLP staff have been working with lecturer Carl Soulsbury to devise a series of herbarium themed sessions. This will include practical sessions in plant collection as well as herbarium specimen mounting with NHM project



Inspirational Plant folders

Over the summer the project officer and Lincolnshire Wildlife Trust's communication team have worked with Ruddocks design and print service in Lincoln to produce the first set of three Inspirational Plant folders. These will form part of a collection of 30 Lincolnshire plants that tell the human story of plants and how they play a key role in our lives; providing a source for medicines, natural materials as well as food for ourselves and other species. Each folder will include a contemporary mounted herbarium specimen accompanied with an information sheet that describes the ecology of the species, the importance of this specimen to the collector and an interesting 'did you know?' section.

What's your plant story?

Do you have an inspirational plant story to tell us? Do you work with plants in your daily life or perhaps one of your ancestors worked with plant material in an interesting way in the past? If so get in touch at: info@lincstrust.co.uk and you may feature in our 30 Inspirational Lincolnshire Plants series that will tour the county to promote the project.



Upcoming events:

A programme of evening talks is being developed over the 2018/19 winter months starting off with a botanical themed Conservation Forum day at Woodhall Spa on the 3rd November for Trust volunteers. This will be a day to learn more about the project, the Fenland Flora Project as well as a key note talk from LLP volunteer, Sarah Lambert about the development of the South Lincs Flora Group and botanical recording in the county. Further project talks can be found on the Lincolnshire Wildlife Trust's 'What's On' page.

#ThanksToYou

As part of the UK wide [#ThanksToYou](#) HLF campaign to acknowledge lottery players contribution to projects such as the Love Lincs Plants project we will be hosting a herbarium themed drop in session during the week commencing 3rd December in Horncastle. Learn how to get involved with the project and make your own mini herbarium sheet keepsake to take away! Please check the Trust's 'What's On' page for further details.

Following on from the success of the first Lincolnshire Field Identification Skills Certificate (FISC) in July we will be running a 2019 assessment day with Natural England officer, Alex Prendergast on the 4th/5th July. This will be an opportunity for new 'FISCers' to get a foot on the Botany Skills Pyramid. Register your interest at lovelincsplants@gmail.com

As we move into the autumn-winter period work will begin on developing the 2019 plant collection programme as well as enhancing the botanical training programme for 18-35 year olds. Over the coming two years we aim to include informal botanical training for over 35s as well as a host of plant themed arts and crafts workshops over the coming two years. To find out more please follow the links below.

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

Project partners:

