

2025 Botany Bay Report

Volunteers and Work Parties



Jude and Matthew have worked tirelessly throughout the year to improve the meadow. Clive has been clearing fallen trees with Rich and Robin Bray. Greta, Anne and Gabriel have been doing Riverfly and water surveys. Ben Marks has treated the cherry laurel and dispatched mink for us. We've had several volunteer days throughout the year for: hedge laying and making a structure of stakes and binders along the school drive; path maintenance using chalk to fill in some of the muddiest areas; pulling the dreaded (!) horsetail and other invasive plants; grass clearance and hedge planting around the three old fishponds. A big thank you to all those involved.

Visitors and Talks in 2025



January:

- Clive and Anne met Nick Heasman to discuss the possibility of a Conservation Covenant for the Botany Bay.

February:

- Clive and Matthew and Anne gave a talk on the Restoration of Botany Bay at Chiddingfold Village Hall.
- Anne and Clive attended the SDNPA Mink training for Rother catchment project using Remoti traps.
- A group of Seaford Prep Year 5 students came for a pond dipping morning in their Green and Sustainability Week.

March:

- We hosted three Seaford Prep Year 6 groups for their Science Week, looking at life in the pond and stream.
- Ryan Ellis, Weald to Waves Landscape Advisor came to work with Clive on the site habitat mapping.

- The Silvia Beaufoy Youth Club came for a “Chill Out” evening in the shelter around the fire.

May:

- Aimee Felus, Chief Executive of Western Sussex Rivers Trust, visited the site with Keir Smith and members of their team.
- Seaford fishing.

June:

- Duncton school head teacher Charles Beckerson and Lisa Bassett visited to plan a visit from the Juniors in 2026.
- Western Sussex Rivers Trust Education Coordinator, Cathy Oldfield visited to plan school visits.
- Seaford Fishing.

July:

- A group from Chiddingfold were shown around the site as a follow up to the talk given in February.

September:

- The BTEC Countryside Management students conducted a bat survey.
- Seaford Fishing.

October:

- Fungus Foray with Jonathan.

November

- The Silvia Beaufoy Youth Club came for more marshmallows!
- Seaford Fishing.

December

- Seaford Fishing.
- Cathy Oldfield and Plaistow primary school teacher planning River Project for 2026.

In addition to these visitors, Botany Bay members have also taken a number interested individuals around the site.

Dormice

Anne



We now have 12 dormouse boxes in the woodland. Until October this year we had only had nesting birds and wood mice using the boxes. In October we found our first dormouse nest and dormouse! This had been reported to the National Dormouse Monitoring Program. This is great news as the Hazel Dormouse has been getting progressively rarer for many years. Currently the Hazel Dormouse is protected by law and classified as ‘vulnerable’ but recent data suggests that this may need to be upgraded to ‘endangered’. Hazel dormice have also been shortlisted by West Sussex Local Nature Recovery Strategy (LNRS) as indicators of healthy ecosystems. They are considered a flagship species; where they occur, the

habitat is usually very suitable for a wide range of other species and therefore they are important bioindicators as they are particularly sensitive to habitat and population fragmentation. We are planning to put in 10 dormouse nest tubes 2026.

The newly sown wildflower area (sown 2024)

In 2024 we scraped the remaining part of the meadow at the beginning of September, taking off the turf and topsoil and placing it as a bund at the top of the meadow. The area was sown with a grass/wildflower mix in the middle of September, so seedlings were visible by the start of October, and created an open sward by winter-time. Throughout the year, weather played an important role in the further development of this grassland.

The winter was very wet, with much water run-off, in particular from the farmland to the south. This caused a number of rivulets to be formed, where the water had overtopped the bund, and in one place caused the collapse of a small section of the bund. This was fixed using a mini digger in January. The early sowing and subsequent autumnal growth minimised the damage to the meadow itself caused by the cascading water.

The spring and summer were very dry, so there was little change in



Repairing the Bund



Sown in 2024, largely Wild Carrot

the quality of the wildflower turf, it remained largely open, this being more so at the westerly end than the roadside end. Nevertheless, the whole of the newly sown area produced flowering by many species typical of the older part of the meadow, such as Ox-eye Daisy and Wild Carrot, but including a number of annuals, such as Cornflower, Field Poppy and Opium Poppy.

Later in the year the weather remained warm with good rainfall, producing a better covering of wildflowers. By October, the turf had developed more fully, but was not sufficiently robust to allow the heavy Graffham

Collect machine to cut the meadow, as has been our normal practice. However, Jude found that our own mower would clear the finer, newly-sown, turf, so cutting started in mid-August.

In mid-October, following a power outage, The South East Electricity Board arranged to re-connect supply to the East Lodge. Despite promises to the contrary, this led to damage to the central part of the meadow. This has been partly rectified by sowing additional wildflower seed and tramping down the major divots.



Damage to the turf

The older wildflower areas, including the bee-bank (Sown 2018-2022)



Cowslips in April

The dry spring and summer seemed to have little effect on the growth in the older grassland areas. By April, it was clear that Cowslips had increased in number from 2024. Though Ox-eye Daisies were still dominant in June there were fewer than in 2024. Wild Carrot remained dominant in July, but was joined by Common Knapweed. Common Knapweed is a rather solid plant and not particularly attractive, its flower just a disc of purple florets. The areas sown in 2018 and 2019 have this form of Common Knapweed. However, there is another form that has a whorl of purple rays, making it similar in appearance to Greater Knapweed. This form was sown in the bee-bank and the new

part of the meadow, which will add to the attractiveness of these areas. It is doubtful that there is much difference in the ecological value of either plant.



Common Knapweed and Ox-eye Daisy



Birdsfoot Trefoil and Wild Marjoram

In April, chalk was deposited around the margins of the recently sown area of the meadow, largely to diminish the step caused by the removal of the turf and top-soil in 2024 and the older wildflower areas. It also helped to form a central path through the meadow. This path was sown with a grass/wildflower mix in April, but no germination was noted for several months, meaning that without that path there was little observation of the wildflowers along the top part of the older area of wildflowers including the bee-bank. However, during brush-cutting operations in this area in November, several plants of Common-spotted Orchid and Ladies-bedstraw were noted. Furthermore, in some areas, the turf underneath the Wild Carrot plants was very short. Regular recording of butterflies was not undertaken this year, but most of our common species were noted during the year. The most notable sightings of insects this year was a scarce fly the Downland Villa, and the nationally-scarce-A Golden-haired Longhorn Beetle. A female Dark-green Fritillary was also seen, in the same area where a male was recorded in 2023.



Dark Green Fritillary



Golden-haired Longhorn Beetle



Downland Villa

A small project to include its foodplant, Hairy Violet, in the grass sward in this area was immediately started. A larger project, to introduce Horse-shoe Vetch, aimed at providing the food-plant for the Chalkhill Blue, was also started this year, with a small chalk bank being added to the bee-bank. In addition, a number of species requiring particularly poor soil were planted. The Chalkhill Blue, has also been seen in small numbers over the last few years.

As we were not cutting the meadow with the GDT machine, we were tempted by the offer of a more powerful mower that should be able to cut the older parts of the meadow. Unfortunately, this offer was beset with difficulties, which meant that cutting the older part was delayed, so continued until November 16th. A cut this late clearly allowed coarse grasses to prosper, so spring mowing will need to be intensified next year. A more powerful mower would allow us more flexibility in our timing of mowing, perhaps enabling an increased variability in our sward heights and seasons across the meadow.

The bund

Not only had the bund collapsed in one area in 2024, but also overtopping had occurred in a number of places during very wet weather. In one of these places, the water had begun to erode the bund, so a solution was sought to prevent this happening again in this winter. Excavation, by hand, at the back of the bund, together with piping and a partially piped ditch, was undertaken to allow water from the farmland to drain directly into Corner Copse.

All the trees and shrubs planted in autumn 2024 have survived, many now showing above their tree-guards. In December 2025 an additional 81 shrubs were planted. These included, Hawthorn, Elder, Wayfaring Tree, Common Buckthorn, Wild Privet, Spindle, Guelder Rose, Crab Apple, Blackthorn, Dog Rose, Sweet Briar, and Burnet Rose.

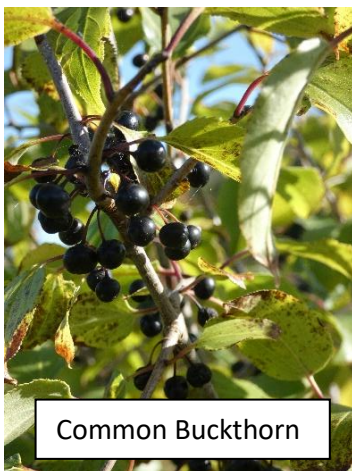


Piped ditch at base of bund

Corner Copse (planted 2021 -22).

Guelder Rose and Common Buckthorn, planted a year later than the other shrubs in this copse, both flowered this year, leading to fruits being produced.

Most of the stakes holding these 1.8m tree guards are hazel and are beginning to rot. This together with the spindly trunk growth apparent in such tall guards has meant that many are prone to falling over. This is particularly the case with the Dog-roses, where there has been considerable top growth. These have been laid down, where it is hoped that their thorny dense growth will restrict the damage caused by Deer, so allowing them to continue growing. However, harm by Deer on any new succulent growth was immediately apparent.



Common Buckthorn



Wayfaring Tree



Dog Rose



Guelder Rose

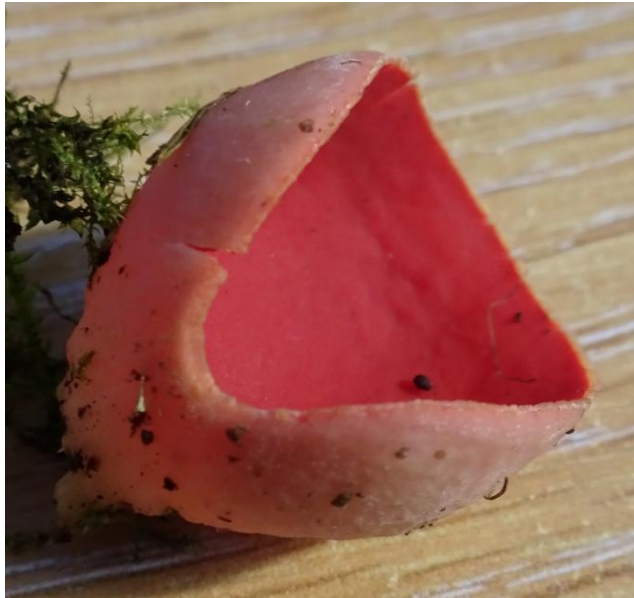


Deer Damage

Fungus at Botany Bay in 2025

Jonathan Simons

The main event of the fungal year at Botany Bay was the annual foray in late October. However, members were keeping their eyes open throughout. In March, for instance, Jude Sennitt spotted the striking **Scarlet Elf-cup** under some brambles, a first for Botany Bay.



We embarked on the now traditional annual fungus foray with low expectations. However Annie had made a preliminary visit and was able to take us to a number of interesting species. Once the team realised that really ‘anything goes’ they began to track down quite a surprising variety of fungal life-forms.

A total of twenty-six records were made, including old favourites like the **Collared Earthstars** and the **Artist’s Bracket** with its characteristic galls caused by the **Yellow Flat-footed fly**.



The abundance of log piles and fallen trunks produced many specimens, notably the very common **Turkey Tail**, *Trametes versicolor*, and **Hairy Curtain Crust**, *Stereum hirsutum*.

Not strictly speaking a fungus was the **Wolf’s Milk Slime-mould**. The little pink spheres when squeezed project an orange milk which can go a surprisingly long way (sorry, Jill).

Water Surveys East Lavington Stream Jan – Dec 2025

Anne



We test the water for Western Sussex Rivers Trust at two points, in the stream below Beechwood Lane and in the lake.

Temperature: This is normally low (around 11c) in the stream and lake, due to the springs coming out of the chalk only about 400 metres above Beechwood Lane. However, readings were extremely high in August both in the stream and the lake, but we didn't have an algal bloom in the lake this year and fishermen could fish all through the summer when other lakes were closed.

Turbidity: The water in the lake and stream is extremely clear. This year turbidity scores were low with just one reading that was more than 5.

Nitrate: levels measured either 2 or 5 ppm on the test strips.

There are no ecological status standards for Nitrogen in Rivers. The Environment Agency's approach is to focus on Phosphate as the main cause of river eutrophication and the nutrient they are most able to reduce to levels that will improve the ecology. There is a standard for Lakes and Reservoirs, which is 0.75 – 1.5 mg/l (ppm). Natural levels of Nitrate in freshwater are typically low, generally well below 5 ppm.

Phosphate: levels ranged between 0.00 and 0.320 ppm in the stream and 0.030 and 0.410 ppm in the lake. The higher phosphate readings for both the stream and lake were in March. See interpretation of results below.

BB Stream/Lake	Temp C St	Temp La	TDS St	TDS La	Nitr St	Nitr La	Phos St	Phos La	Turb S	Turb L
10/1/25	07.9	08.2	269	254	2	5	0.090	0.220	5	5
1/3/24	10.6	10.8	294	245	2	2	0.320	0.410	5	5
31/3/25	11.4	11.6	219	243	5	5	0.000	0.110	5	5
1/5/25	13.6	13.0	233	242	5	5	0.130	0.030	10	5
6/6/25	12.7	13.8	232	253	5	2	0.000	0.050	5	5
8/7/25	13.4	12.3	224	253	2	2	0.060	0.150	5	5
12/8/25	17.8	16.6	224	246	2	2	0.000	0.000	5	5
2/10/25	11.2	10.9	224	262	5	2	0.130	0.110	5	5
1/11/25	12.4	11.8	249	261	2	2	0.190	0.180	5	5
2/12/25	10.0	10.0	258	233	5	5	0.200	0.070	5	5

Interpreting your results



Phosphate*¹ - Orthophosphate (PO₄³⁻) as measured by Hanna Colorimeter

High	Good Ecological Status	Moderate / Poor
< 0.077 ppm	0.077 – 0.306 ppm	> 0.306 ppm

Nitrate*² - as measured by Hach Nitrate Test Strips

Natural	Elevated	Excessive
< 1 ppm	1 – 4.9 ppm	≥ 5 ppm

Riverfly Surveys



We survey two stretches of the stream in spring, summer and autumn for eight indicator species for The Riverfly Partnership. We don't want to over survey the stream so if we show a kick sample to a school group we don't survey in that month. From October to March, we keep out of the stream due to spawning brown trout and bullheads. We have a trigger level of 8 for 'Beechwood Lane' site and 6 for the lower 'Duncton' site – if our scores go below the trigger levels the EA would be alerted. Data goes to Cartographer (run by WSRT).

Anne

Botany Bay Beechwood Lane (Gabriel Sullivan)

	3/3/2025	1/4/2025	21/5/2025	17/8/2025
Cased caddis	100	70	61	40
Caseless caddis	4	6	6	2
Mayfly	0	0	0	0
Blue winged olive	4	8	10	3
Flat bodied stone clinger	12	22	10	0
Olives	12	100	100	50
Stoneflies	1	1	0	0
Freshwater shrimp	600	300	300	250
ARMI SCORE	13	13	13	9

Riverfly Botany Bay, Duncton (Anne and Greta)

	40/4/2025	8/7/2025	15/8/2025
Cased caddis	70	20	25
Caseless caddis	3	4	3
Mayfly	2	6	8
Blue winged olive	30	12	7
Flat bodied stone clinger	15	0	0
Olives	100	50	100
Stoneflies	1	0	0
Freshwater shrimp	200	100	70
ARMI SCORE	16	11	10

Mink Dispatch

Anne

We trap invasive American mink in Botany Bay as part of a SDNPA project in the Rother catchment to protect native species like water voles. Using the Romoti mink raft we add a new lure each month, these are sent by the Waterlife Recovery Trust (Tony Martin), in return for the mink which are all tagged and sent for analysis (frozen – by post!). This year we have dispatched the following: 15 May large male, 29 September young female, 20 October large female. 28 October large female.

Thank you Ben for taking over the dispatching of the mink this year.

Bats

We received this data from the Seaford Countryside Management BTEC department. We are very happy to have the students surveying each year in September as part of their coursework.

Bat detector results from Seaford College 17-18 September 2025 at Botany Bay

The chart shows the number of bat calls detected and identified to species with a confidence level above the threshold set by BTO Acoustic Pipeline.

Summary	2025		2024			2023
Location & date	Botany Bay		Botany Bay			Botany Bay
Species Name	17-Sep	18-Sep	16-Sep	17th Sept	18-Sep	21-Sep
Number of BAT CALLS						
Barbastelle	0	9	14	30	38	23
Serotine	1	55	56	48	53	103
Myo Brandt's Bat	1	14	38	318	301	23
Myo Daubenton's Bat	0	83	70	244	183	269
Myo Whiskered Bat	0	1	15	58	12	29
Myo Natterer's Bat	2	52	55	74	84	172
Noctule	1	8	11	7	0	11
Nathusius' Pipistrelle	0	7	0	0	0	1
Common Pipistrelle	2	1114	588	3189	3215	313
Soprano Pipistrelle	207	1844	1581	6582	8171	345
Brown Long-eared Bat	1	18	17	23	24	10
	215	3205	2445	10573	12081	1299
Bush Cricket Strigulations						
Dark Bush-cricket	0	1148	568	617	1916	791



To Mow a Meadow

Jude Sennitt

Our Alco ride-on mower, 'big red' as I call it, was bought in 2023 largely to maintain the various footpaths around Botany Bay. I soon extended its use to include part of the lake



bank where the fishermen cast their flies, something the fly-fishermen were thankful for. Also, the machine was found to be useful for a spring-cut of those parts of the meadow deemed to be in need of a reduction in nutrients. Nutrients encourage the thicker grasses to grow, with which the wildflowers find difficulty competing.

In 2025, the meadow needed its regular autumn cut, but because of the very dry spring and summer, the newly sown sward was not sufficiently thick to be cut by tractor, so the task was given to Big Red. This it

accomplished, a little more slowly than usual, but I found it could also tackle some of the more mature sward. The remainder was cut by brush-cutter, then raked. Altogether I spent over 55 hours from April to October, mowing various areas of Botany Bay.

Big Red has its limitations and has a few idiosyncrasies, such as the battery not charging, and grass getting caught in the collecting tube. It is reaching retirement. But it has demonstrated the value of having a machine that gives us greater flexibility of grassland management, such as the timing and height of grass cutting. Both these factors alter the floristic content of the sward.

Woodland and Planting

Anne



In March John Bentley continued to fell the ash trees affected with dieback which he identified in his safety survey 2023. Clive has also been clearing fallen ash from the stream and woodland. He had also been felling some leaning willow and silver birch along The Drive which has brought more light to the hedging west of the lodge.

With help from Gill, Greta and Jude, 155 hedging plants have been planted around the three ponds where the fencing was starting to rot. These include 50 hedging plants from SDNPA 'Trees for the Downs' project and 105 'Wild Harvest' mix from The Woodland Trust. A further 75 trees from 'Trees for the Downs' have been planted on the bund. See Matthew's report for details.

Fishing PSFFA

Robin Bray/Anne



There were 90 visits, during which 17 wild brown trout and 195 stocked rainbow trout were caught from 4/12/24 to 2/12/25. This is very pleasing as after we stocked in October 2024 with 50 rainbows, there were only two more stockings of 50 fish per time on March 21st and September 16th this year.

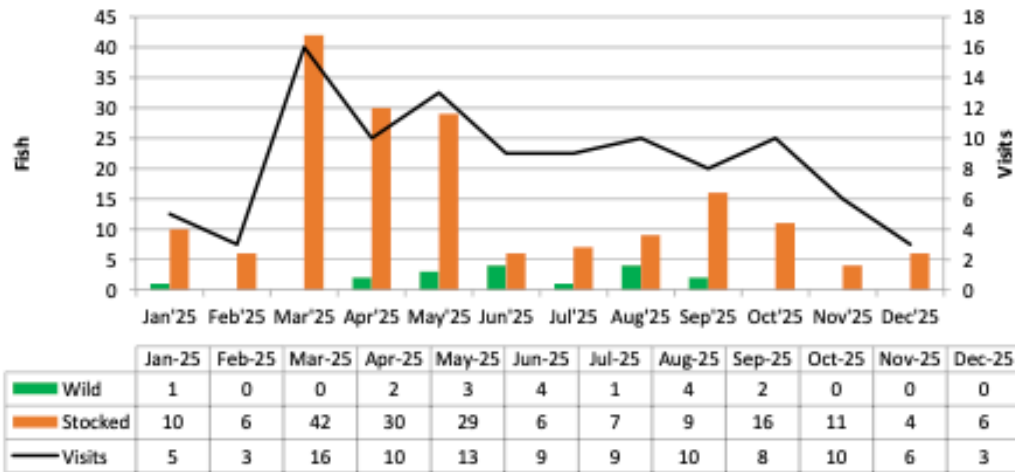
PSFFA kindly allowed six visits from Seaford's fishing club in the summer term with Chris Adams, and four visits in the autumn term with Jo Blair, an experienced angler. She has organised for the students to fish in their lunch hour during the winter months. There are four students who fish regularly and are very keen fly fishermen. Jo Blair keeps a record of the catch returns which are sent on to Robin Bray; the students fish with barbless hooks so that the fish can be returned.

Portsmouth Services Fly Fishing Association

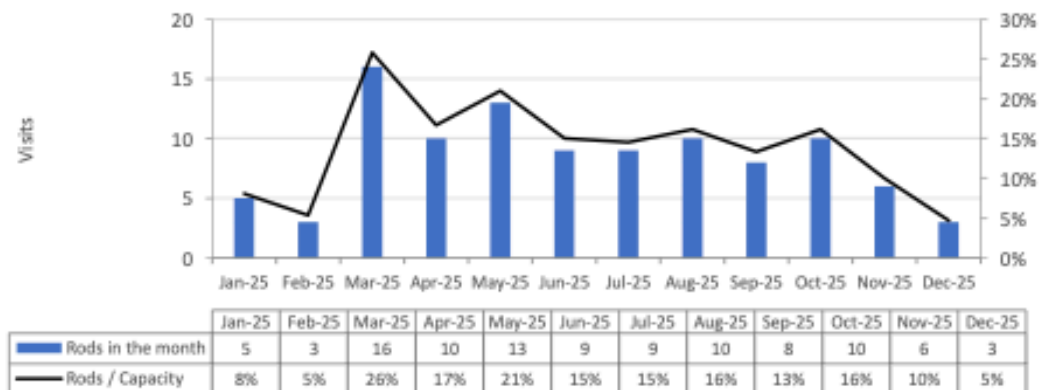
Catch Return Report Calendar Year 2025

Lake - Lavington Park

For the period 01-Jan-25 to 21-Dec-25



Lake - Lavington Park Beat was fished on 102 occasions out of an available 728
(Rods = 2 x Days in season = 364), which is 14% of capacity.



Many thanks to all our members, volunteers and supporters. Please let me know if there are any changes or omissions to this report.
annedennig@icloud.com