Tansy Beetle Surveys 2025

Compiled by Douglas Louis

on behalf of the Tansy Beetle Action Group (TBAG)

A clutch of seven Tansy Beetle eggs on the underside of a Hemp Nettle leaf (*Galeopsis tetrahit*) seen at the Woodwalton Fen NNR. The developing larvae can be seen through the eggshells, indicating that the eggs were close to hatching.

Tansy Beetle Surveys

CONTENTS

INTRODUCTION

The Tansy Beetle (*Chrysolina graminis*) is formally Red Listed in the UK as ‘Endangered’. In addition, the beetle is categorised as a Section 41 species which means it is a 'Species of Principal

Importance for the purpose of conserving biodiversity in England' in accordance with the Natural Environment and Rural Communities Act 2006. Under this ruling, public bodies have a duty to protect it, together with its habitat. As part of the programme to understand, protect and increase the numbers of this species, the Tansy Beetle Action Group annually surveys the distributions of Tansy (*Tanacetum vulgare*) and Tansy beetles across their whole range on the banks of the river Ouse and the "ark" sites on the Selby Canal and the river Foss. This report covers the seventeenth year of survey work with the 'survey season' starting, in 2025, on Thursday, 7th August and ending on Sunday, 7th September, a 32-day period. Despite some surveyor changes, 2025 saw all transects along the river Ouse surveyed. In addition, stands of Marsh Woundwort (*Stachys palustris*), Gipsywort (*Lycopus europaeus*) and Water Mint (*Mentha* spp.) were again surveyed this year, as Tansy Beetles have often been found to eat these plants in the past. The report also covers Tansy plant and Tansy Beetle management along the river Ouse, on-going phenology studies, developing Tansy beetle ark sites for educational purposes and the status of indigenous Tansy Beetle populations located in the Cambridgeshire Fens.

SUMMARY

The 2025 surveys for Tansy Beetles showed another year of decline in Tansy Beetle numbers with the 72% decrease of 2024 being followed by a 70% drop in numbers for 2025, where only 3685 Beetles were observed across the River Ouse range. After applying the doubling rule, the total late summer population on Tansy plants was estimated to be 7370 beetles for 2025. However, this drop in beetle numbers may have been influenced by beetles hibernating earlier, since the start of the survey window on the 7th August was at least two weeks after the peak in beetle numbers shown in two phenology studies conducted in 2025. Furthermore, these studies also disclosed beetle numbers rapidly declining after peaking during the third week in July. Finally, a number of surveys were done in the last half of the survey window, after the 21st August, and this may also have contributed to the low number of beetles counted. Despite most transects yielding evident diminutions, there were some increases. Beetle numbers went up 88% to 60 beetles at Rawcliffe Meadows, 194% to 367 beetles on the transect from Clifton Bridge to Scarborough Railway Bridge, 50% to 716 beetles along the west bank of the river Ouse from Linton Locks to opposite Newton-on-Ouse, 192% to 35 beetles on the east bank between the Blue Bridge and Fulford Picnic area and 394% to 63 beetles on the east bank from Riccall to Barlby. Reduced beetle populations were observed on the ark sites with the river Foss population dropping to one beetle and no beetles recorded along the Selby Canal.

When considering other food plants, fewer Tansy Beetles were seen feeding on them in 2025 when compared to 2024. Thus in 2025, 3 transects yielded 13 beetles on 4 stands of Marsh Woundwort whilst 2024 saw 7 transects with 124 beetles on 27 stands. A similar picture also emerged with mixed stands of Marsh Woundwort and Tansy in 2025 with only 3 stands showing 14 beetles whereas 2024 produced 11 stands with 113 beetles. Water Mint was also eaten by Tansy Beetles with 9 beetles seen on 3 stands in 2024. However, in 2025 Tansy beetles were only seen on one mixed stand of Water Mint, Gipsywort and Marsh Woundwort (3 beetles) and one mixed stand of Water Mint and Marsh Woundwort (4 beetles). Regarding Gipsywort, no beetles fed on this species in 2024, but in 2025 there were 3 beetles on one stand and 1 beetle on a mixed stand of Gipsywort and Marsh Woundwort.

June Whittaker continued her ongoing phenology study of Tansy Beetles at Bishopthorpe and Rosie Robinson-Pethullis initiated a similar study at Beningbrough Hall. Both studies have noted the second adult generation peaking around the third week in July and then declining rapidly thereafter as the beetles go underground for hibernation. This finding has raised concerns over the lateness of the survey window used by surveyors along the river Ouse and that it should be started earlier.

Furthermore, the issue of declining beetle numbers was also raised by some of the surveyors who saw more beetles when viewing their transects on an earlier date than when actually doing the survey at a later stage. Following a TBAG meeting on the 14th March 2026, a decision was taken to start the survey on the 22nd July, around when Tansy Beetle numbers peak during their second phase above ground, and then finish on the 22nd August.

Considering ark/educational Tansy Beetle sites, York Museum Gardens are still expanding their existing ark/educational site for Tansy Beetles and are looking to re-introduce beetles in 2026. Askham Bryan College found more beetles present in the spring rather than the summer period at their two ark sites and beetle numbers were higher in the Farm Site when compared with the Wildlife Park Site in both 2024 and 2025. Only one Tansy Beetle was seen in 2025 following beetle introductions on Tansy plants at University of York St. John Sports Fields in 2022 and 2023. Ark sites and educational facilities are being developed at Bugtopia, Hornsea and Banham Zoological Gardens to house and promote the Tansy Beetle.

In addition, reports are included from the two Tansy Beetle fen populations, one at Woodwalton and the other at Welney. The Woodwalton population appears to be holding its own in 2025 but it is quite likely this was partly helped by the introduction of captive reared beetles in 2024 and 2025. Likewise, the Tansy Beetle population at Welney Fen improved in 2025 but numbers still remain very low.

Finally, Vicky Wilkins reports on riverbank habitat management measures that encourage landowners to take a more sympathetic approach to land use, which allows sustainable Tansy plant and beetle proliferation.

RESULTS

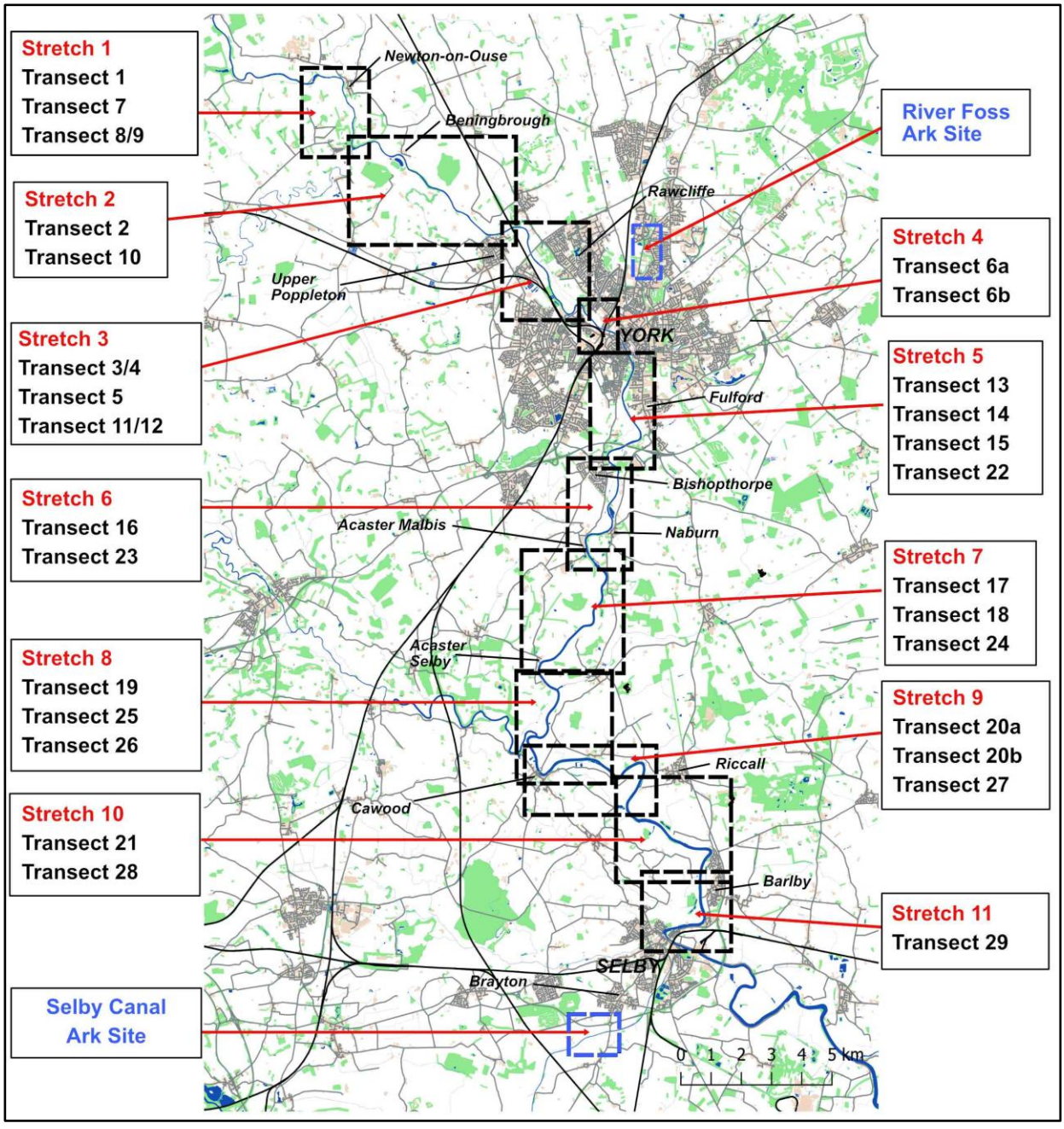
Surveyed river and canal stretches

All of the transects within the stretches were surveyed along the river Ouse during 2025, from Linton Lock (SE499601) in the north to near Selby (SE627342) in the south, a river distance of some 46.8 km (29.1 miles). Certain unsuitable sections, which have not been surveyed for many years, include the privately-owned stretch immediately south of Kelfield village (heavy grazing) and the grounds of Naburn Sewage works (overgrown, shaded banks).

Figure 1 shows the various survey stretches along the river Ouse (black dashed boxes) and two ark sites (blue dashed boxes), one along the Selby Canal and the other by the river Foss (Ark sites are discussed in **Ark & Educational Populations** on **Page 66**). **Figures 2 to 28, 38, and 41** provide maps showing the transect extents, locations of Tansy clumps together with those of Marsh Woundwort, Gipsywort and Water Mint and mixed combination stands of the aforementioned species. In addition, the maps also show Tansy Beetle occupancy on these plant species.

For those river stretches containing stands of Marsh Woundwort, Gipsywort and Water Mint, with or without resident Tansy Beetles, their locations are marked by black-lined rectangles in the relevant maps. This also applies to mixed stands of these species with or without Tansy clumps. The area within the black lined rectangle is enlarged on a separate map and the location of the plant species with or without Tansy beetles is incorporated. This method enables the few stands of the non-Tansy plant species to be clearly pinpointed, which would not have been possible on the smaller scaled river stretch maps with numerous locations of Tansy plants with or without Tansy Beetles included.

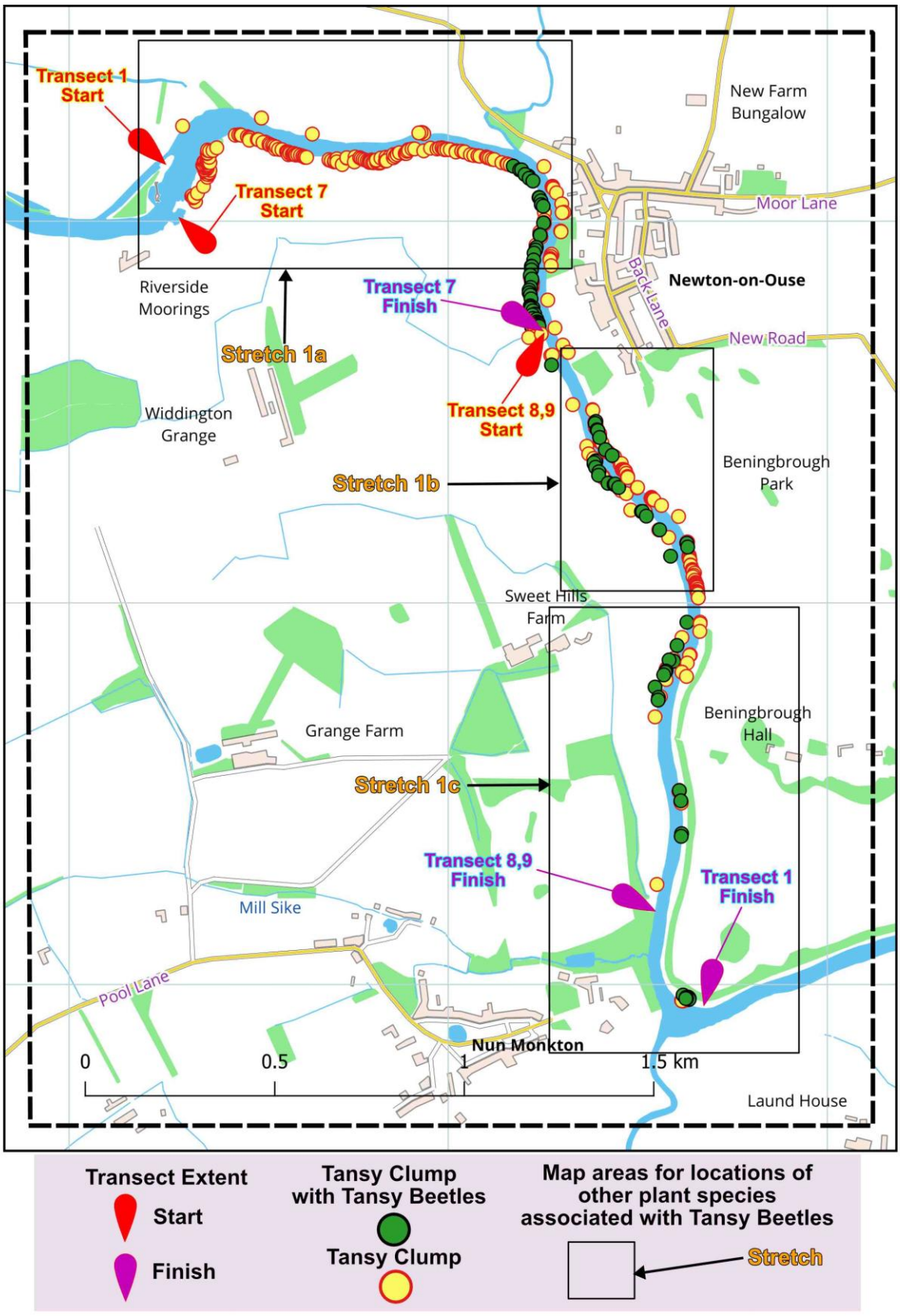
Figure 1. Overview map showing numbered survey stretches with their associated transects and ark sites. Some transects have been combined and are shown by slashes between the transect numbers.



It must be stressed that the use of the term "stands" of Gipsywort, Water Mint and especially Marsh Woundwort is open to debate, as the plants can occur scattered at low density along a considerable length of river bank. In turn, this makes it difficult to geolocate accurately the start and end of a "stand" and thus estimate its full extent. Thus, the symbols used for the above plant "stands" (with or without Tansy Beetles) on the maps will only be an approximate location.

Stretch 1 – Linton Lock to Nun Monkton

Figure 2. Stretch 1 – Linton Lock to Nun Monkton



Transect 7 West Bank surveyed by: -

Vicky Wilkins & Hannah Black (Former surveyor same, latter new).

Table 1. Transect 7 West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Tansy Clumps	Occupied Clumps	Beetle Count	Occupancy Value	Survey date	Main Management
West bank	218	44	479	20%	21/8/2024	Grazing Cattle/Wild
West bank	177	49	716	28%	12/8/2025	Grazing Cattle/Wild

Transects 8/9 West Bank surveyed by: -

Phil Robinson (Same surveyor as in 2024).

Table 2. Transect 8/9 West Bank Survey results for 2024 and 2025 (grey highlight) for comparison

Location	Tansy Clumps	Occupied Clumps	Beetle Count	Occupancy Value	Survey date	Main Management
West bank	43	32	449	74%	5/9/2024	Grazing Cattle/Wild
West bank	61	28	141	46%	3/9/2025	Wild

Survey assessment: -

Survey results for Transects 7 and 8/9 shown above in **Table 1** and **Table 2** respectively.

Locations of Tansy plants with and without Tansy beetles shown in **Figure 2**.

Transect 7 also yielded 1 mixed stand of Water Mint with Tansy but without any Tansy Beetles (**Figure 3**).

Management, threats and changes: -

In Transect 7 the existing large patches of dense willow (*Salix* spp.) still limit further Tansy plant colonisation despite the Tansy clumps being prolific along this transect. Likewise, Himalayan Balsam (*Impatiens glandulifera*) occurs in the very western part of the Transect 7 and remains a potential threat to Tansy plant proliferation, but this issue appears less evident in the east where Himalayan Balsam is sparser. Cattle graze the fields in this transect, but not all of the river bank is accessible to them, so there are a number of sections which remain quite wild.

Considering Transect 8/9, the Himalayan Balsam was abundant in the southern reaches of the transect but overall, the amount of this invasive plant species in 2025 did not seem to be any greater than in

Figure 3. Stretch 1a – Locations Marsh Woundwort and a mixed stand of Water Mint and Tansy without Tansy Beetles along with Tansy with and without Tansy Beetles east of Linton Locks.

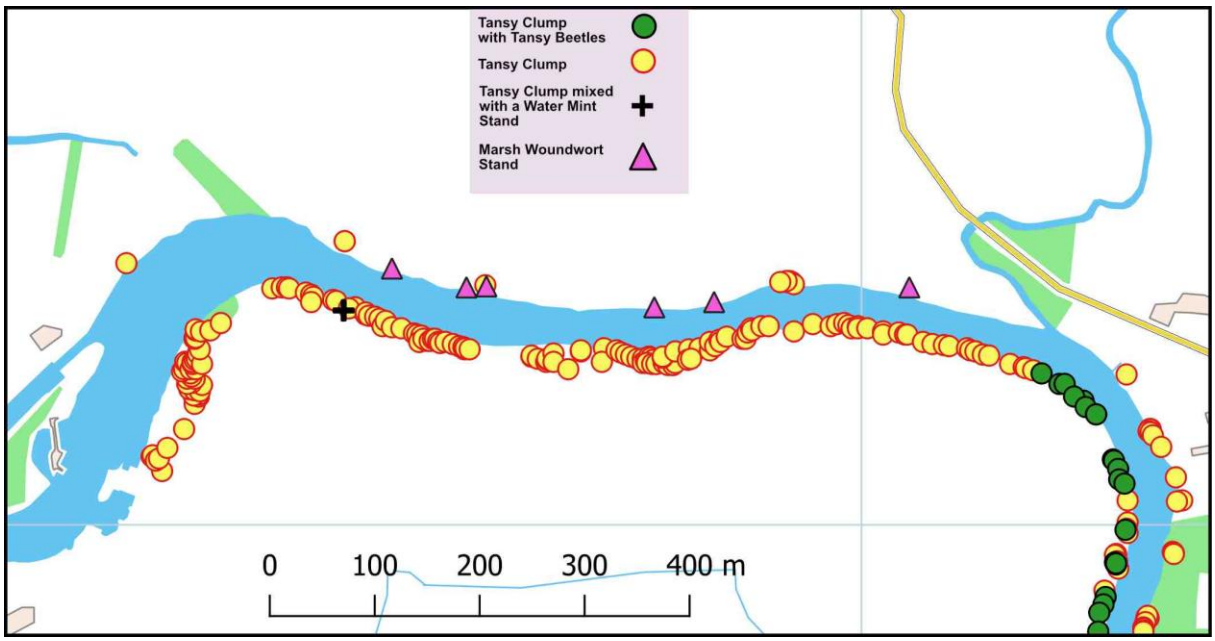
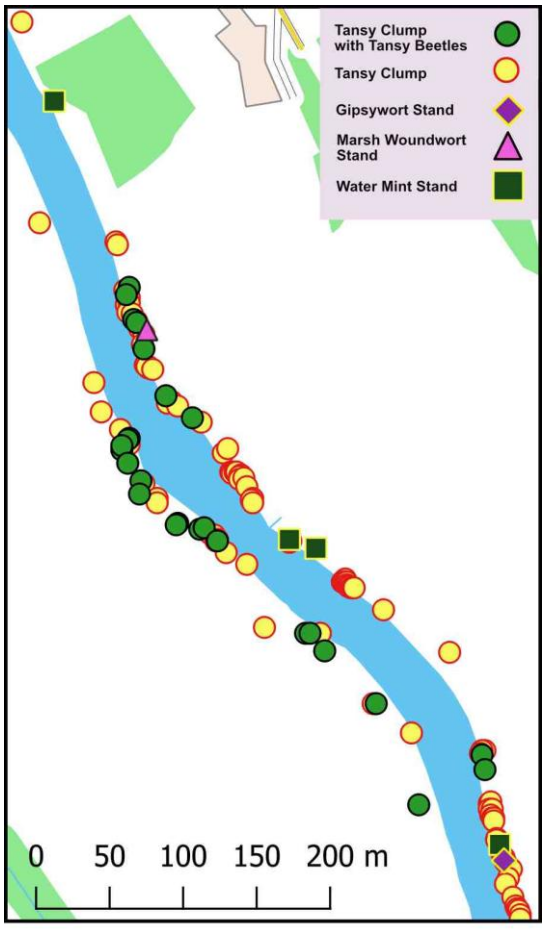
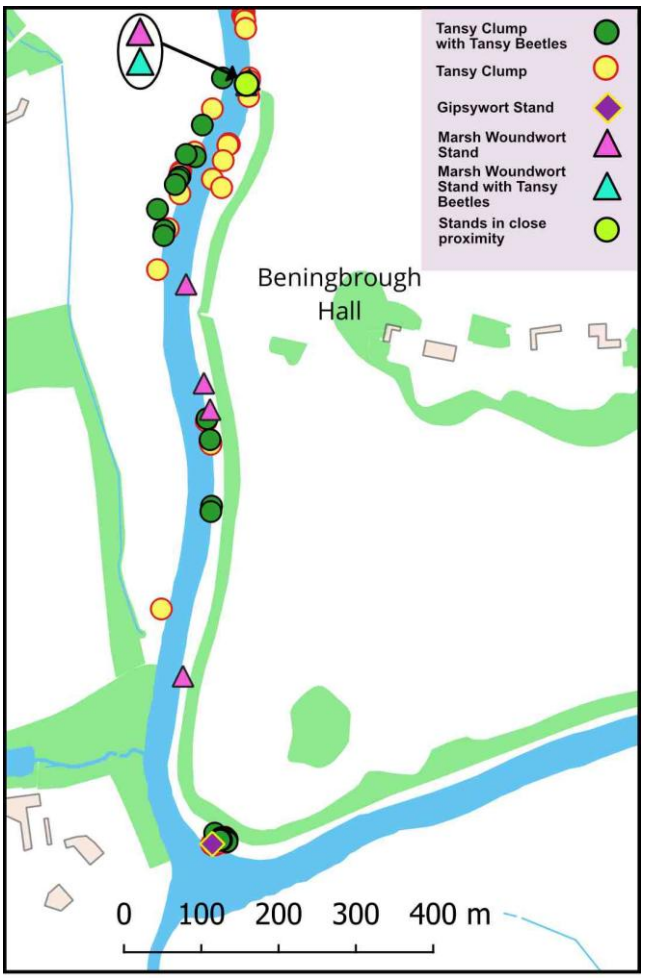


Figure 4. Stretch 1b – Locations of Marsh Woundwort, Water Mint and Gipsywort stands without Tansy Beetles and Tansy with and without Tansy Beetles south of Newton-on-Ouse.



previous years. Cattle grazing was again evident in 2025, but the amount of grazing and trampling was limited. There was also evidence of bank clearance by the resident Angling club removing scrub and constructing steps down the banking. An additional concern in 2024 was the significant growth of Nettle (*Urtica dioica*), Ground Elder (*Aegopodium podagraria*) and Creeping Thistle (*Cirsium arvense*) along the river bank. Certainly in 2025, the Creeping Thistle appeared to be very aggressive and encroaching on areas where Tansy clumps had disappeared or reduced in size. Overall, this transect has seen a demise in large Tansy stands over the years in the north with little emergence of new Tansy growth. In areas where Tansy is beginning to be found, the growth was predominantly low and heavily grazed by the beetles. Finally, it was also noted that much of the Tansy in the 2025 survey was showing die back with some new growth.

Figure 5. Stretch 1c – Locations of Marsh Woundwort with and without Tansy Beetles, Water Mint and Gipsywort without Tansy Beetles along with Tansy with and without Tansy Beetles west of Beningbrough Hall.



Transect 1 East Bank surveyed by: -

Alwyn Craven and Thomas Hook (Same surveyors as in 2024).

Table 3. Transect 1 East Bank Survey results for 2024 and 2025 (grey highlight) for comparison

Location	Tansy Clumps	Occupied Clumps	Beetle Count	Occupancy Value	Survey date	Main Management
East bank	83	23	129	28%	3/9/2024	Grazing (cattle/sheep), wild
East bank	182	21	115	12%	31/8/2025	Grazing (cattle/sheep), wild

Survey assessment: -

Survey results for Transect 1 are shown above in **Table 3**.

Locations of Tansy plants with and without Tansy beetles shown in **Figure 2**.

Throughout Transect 1 there were other food plants the Tansy Beetle could utilise as shown in **Figures 3, 4 and 5**. The survey revealed 13 Marsh Woundwort, 4 Water Mint, 2 Water Mint stands along with one mixed stand of Water Mint with Tansy. Of the 13 Marsh Woundwort stands found, only one plant had a single Tansy Beetle.

Management, threats and changes: -

In the areas of riverbank north of Beningbrough Hall parkland, Himalayan Balsam continues to threaten opportunities for Tansy colonisation. In the vicinity of Newton on Ouse village, residents adjacent to the river either strim the bankside vegetation or encourage the proliferation of Tansy plants to benefit the Tansy Beetle. Finally, the area around the Linton Lock is kept strimmed, preventing any colonisation by Tansy plants. As in previous years, sections of the Beningbrough parkland continue to be heavily grazed by cattle, leading to bank erosion and extensive damage to emerging and existing Tansy plants. In the more southerly part of the Beningbrough parkland where cattle grazing is less intensive, stands of Himalayan Balsam are more prevalent.

Stretch 2 - Nidd confluence to Nether Poppleton

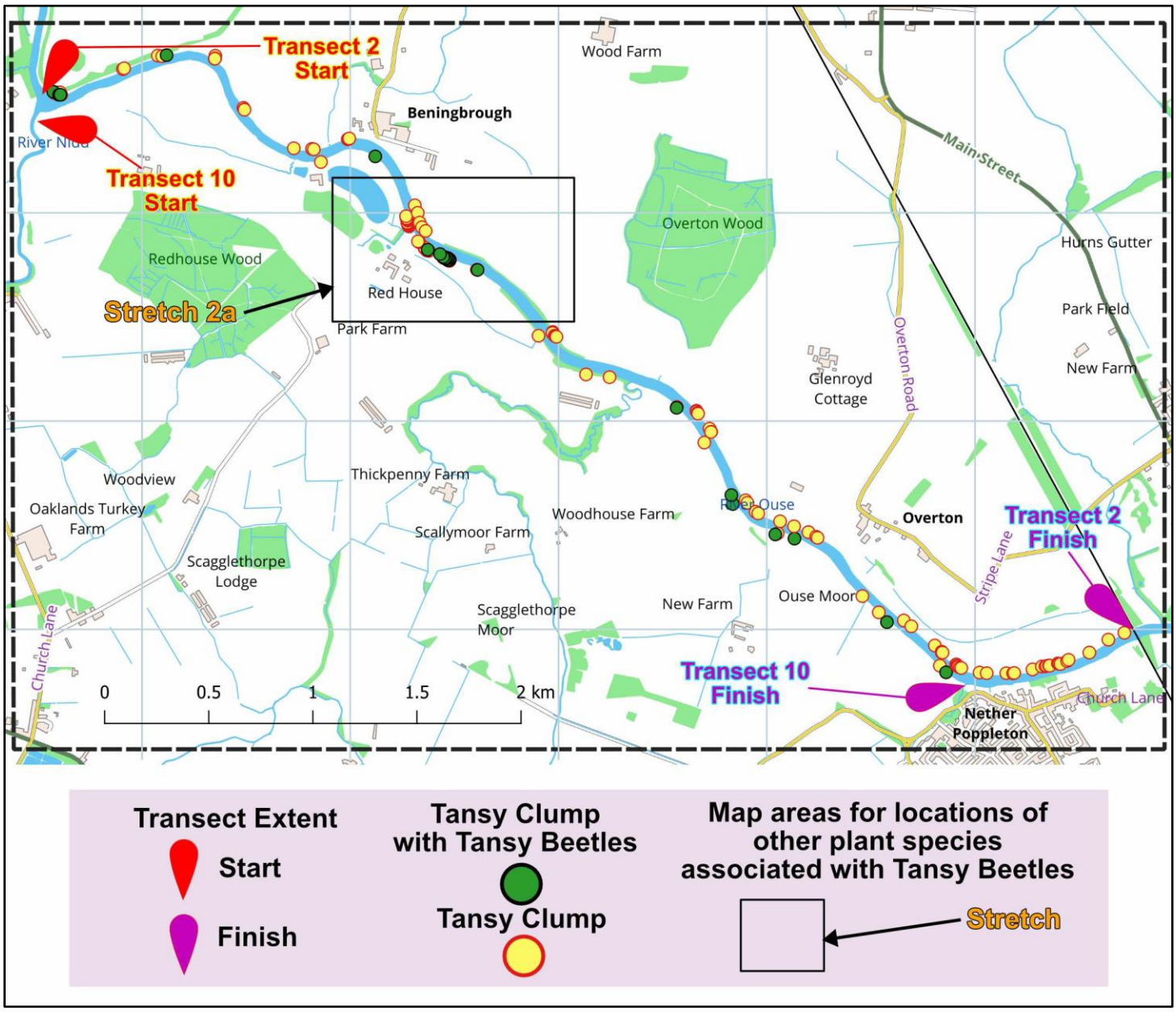
Transect 10 West Bank surveyed by: -

Meg Stark (Same surveyor as in 2024).

Table 4. Transect 10 West Bank Survey results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clump	Beetle Count	Occupancy Value	Survey date	Main management
West bank	46	24	194	52%	11/8/2024	Grazing sheep/horse and mown
West bank	65	22	153	34%	9/8/2025	Grazing sheep/horse and mown

Figure 6. Stretch 2 - Nidd confluence to Nether Poppleton



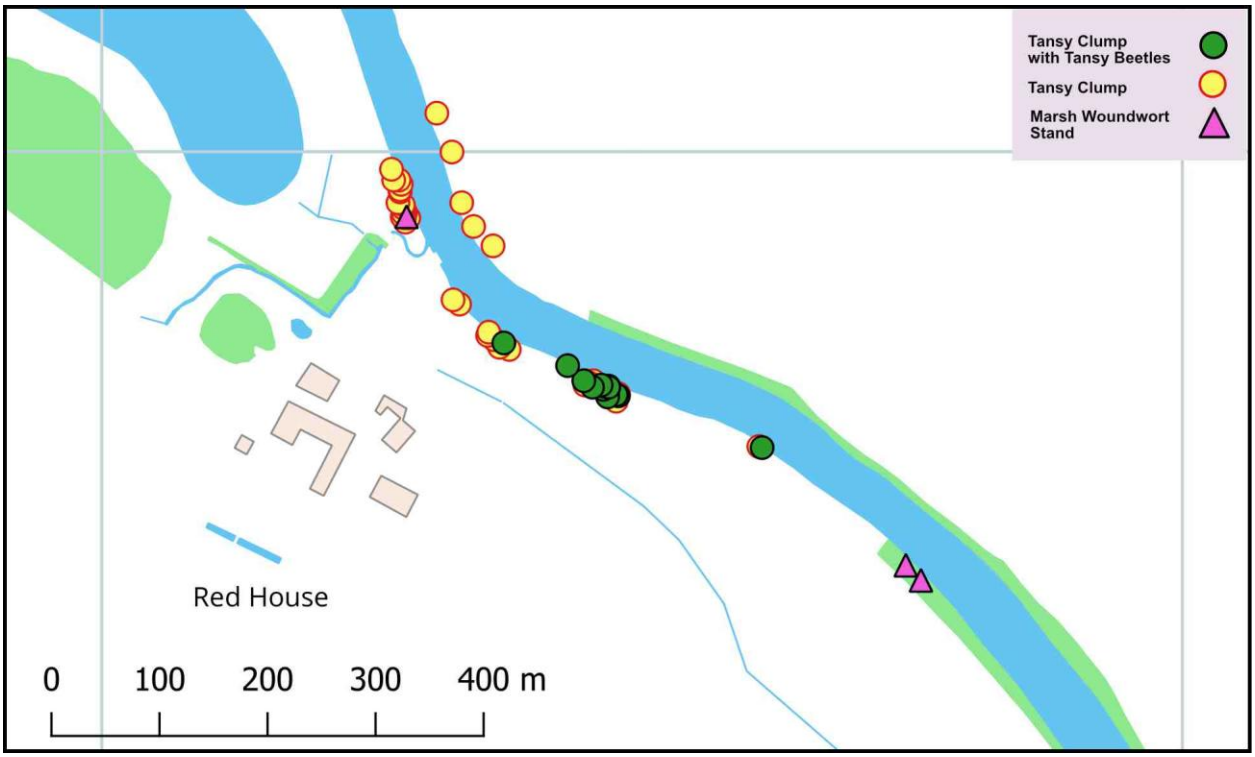
Survey Assessment: -

Survey results for Transect 10 are shown above in **Table 4**.

Locations of Tansy plants and occupied Tansy clumps along Transect 10 are shown in **Figure 6**.

Regarding alternative food plants, the number of Marsh Woundwort stands remains unchanged from 2024 to 2025 with three stands present as shown in **Figure 7**. However, in 2025 no Tansy Beetles were present on these plants.

Figure 7. Stretch 2a – Marsh Woundwort without Tansy Beetles and Tansy with and without Tansy Beetles south of Beningbrough



Management, threats and changes: -

Looking back at previous years, the issue in 2020 affecting beetle numbers appeared to be detrimental sheep grazing and possibly flooding in the north, whilst the horse grazing and mowing regimes in the southern part enabled the beetles to flourish. In 2021 the picture altered somewhat with early sheep grazing in the north, extensive Himalayan Balsam colonisation in the south, with only the horse grazed areas providing a suitable habitat for Tansy retention. Considering 2022, the most notable observation was regarding the bank vegetation with extensive stands of Himalayan Balsam prevailing in the south and becoming less evident in the northern parts of transect 10. In 2023 the distribution of the Himalayan Balsam was similar to 2022, but there was less grazing by sheep. This changed in 2024 with more Himalayan Balsam evident and extensive sheep grazing. In 2025 the Himalayan Balsam was still very evident but shorter due to the drought-like conditions prevalent at the time.

Transect 2 East Bank surveyed by: -

Tony Fairburn (Same surveyor as in 2024).

Table 5. Transect 2 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clump	Beetle Count	Occupancy Value	Survey date	Main management
East bank	116	29	135	25%	25/8/2024	Grazing cattle/sheep
East bank	95	4	16	4%	31/8/2025	Grazing cattle/sheep

Survey Assessment: -

Survey results for Transect 2 are shown above in **Table 5**.

Locations of Tansy plants and occupied Tansy clumps along Transect 2 are shown in **Figure 6**.

Management, threats and changes: -

Although land use is very mixed on the east bank, the cattle-grazed area between the Nidd/Ouse confluence and Beningbrough village usually records good numbers of beetles. However, this changed in 2020 with low beetle numbers being reported and may have resulted from other land management changes and/or flooding. During 2021 an increased pressure on the Tansy clumps from expanding Himalayan Balsam stands was evident and continued into 2022 restricting access to at least 60% of the riverbank. In spite of improved beetle numbers in 2023, the colonisation by Himalayan balsam continues unabated on virtually the whole transect with large stretches of the bank inaccesssible. This situation has further deterioated in 2024 with very dense Himalayan Balsam stands in the west half of the transect. 2025 has seen further encroachment by Himalayan Balsam, but occurring mainly in areas not grazed by cattle. In addition the Tansy suffered from dieback due to the ongoing drought conditions through the summer period.

Stretch 3 - Nether Poppleton to Clifton Bridge

Transect 11/12 West Bank surveyed by: -

Neil McIlveen (Same surveyor as in 2024).

Table 6. Transect 11/12 West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

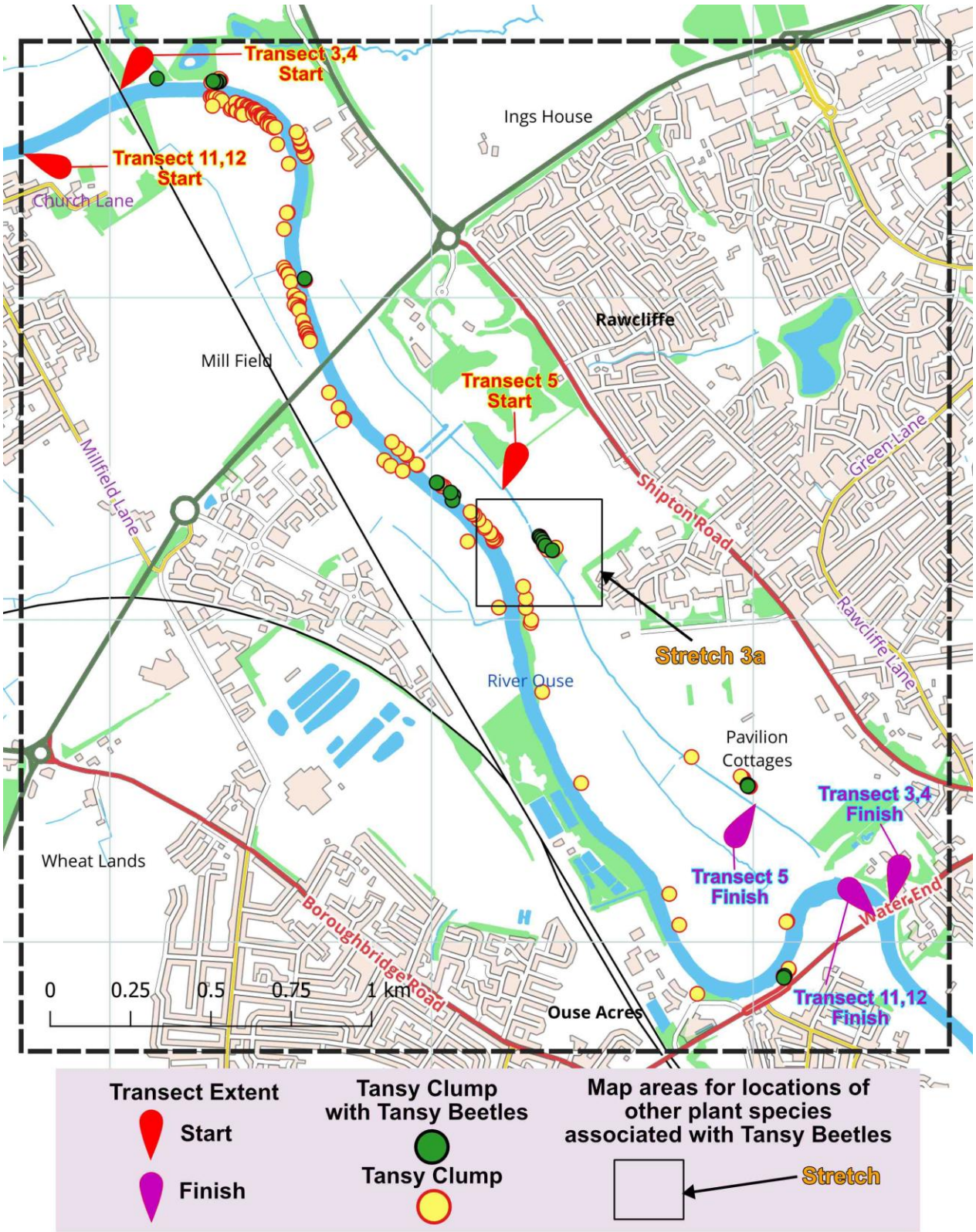
Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
West bank	102	3	30	3%	26/8/2024	Mown & Sheep/Cattle grazing
West bank	104	2	12	2%	11/8/2025	Mown & Sheep/Cattle grazing

Survey Assessment: -

Survey results for Transect 2 are shown above in **Table 6**.

Locations of Tansy plants and occupied Tansy clumps along Transect 11/12 are shown in **Figure 8**.

Figure 8. Stretch 3 – Nether Poppleton to Clifton Bridge



Management, threats and changes: -

Transect 11/12 contains unmanaged areas and fields grazed by either sheep or cattle. Results in 2020 suggested the beetle was generally doing better in the cattle grazed areas. It is quite likely the above land management practice had further affected the Tansy clumps and finally led to beetle numbers collapsing in 2022, since beetles only occurred right at the southern end on the unmanaged section of riverbank running from the RSPCA to Clifton Bridge (Clifton Short-reach). Another factor that may have contributed to the diminution in beetle numbers is the wear and tear on the Tansy plant enclosures, which are becoming more accessible to grazing stock. Furthermore, in 2021 mention was made of collapsing riverbanks in many areas and stands of Himalayan Balsam colonising the river edge. Certainly, the latter element was noted as a concern in 2022. Despite the aforementioned problems being evident in 2023 and 2024 as well, Tansy Beetles were spotted on the riverbank running from the RSPCA to Clifton Bridge. It is quite likely that Tansy Beetles may have been present in 2022 but were not seen. In 2025 the land is still grazed mainly by cattle and Himalayan Balsam remains a growing threat to Tansy plant colonisation.

Transect 3/4 East Bank surveyed by: -

Anne Carter, Rachel Midgley and Vicky Wilkins (Same surveyors as in 2024).

Table 7. Transect 3/4 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	59	17	38	29%	31/8/2024	Mown and cattle grazing
East bank	64	11	32	17%	17/8/2025	Mown and cattle grazing

Survey Assessment: -

Survey results for Transect 3/4 are shown above in **Table 7**.

Locations of Tansy plants and occupied Tansy clumps along Transect 11/12 are shown in **Figure 8**.

Management, threats and changes: -

In 2020, 2021, 2022, 2023 and 2004 beetle numbers appeared to do better on the floodplain meadow in the southern part of this transect. The increased numbers could be down to the effective management by the Environment Agency mowing around the Tansy clumps and ensuring reduced grazing by stock. In contrast, the area with a higher intensity of cattle grazing just beyond the floodplain meadow that runs up to and past the ring road, has very little Tansy and only a few beetles. Finally, in the last area up at the Skelton gauging station near the railway bridge, a few beetles were present. 2025 presents a similar picture (**Figure 8**) regarding Tansy Beetle distribution so there may be other indeterminate factors at play leading to a drop in beetle numbers. Regarding the spread of Himalayan Balsam, this was particularly vigorous in 2025.

Transect 5 East Bank, Rawcliffe Meadows, surveyed by: -

Nicola Ward (New surveyor in 2025).

Table 8. Transect 5 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
Rawcliffe meadow	29	17	15	59%	9/8/2024	Cattle grazing and unmanaged
Rawcliffe meadow	26	10	60	38%	20/8/2025	Cattle grazing and unmanaged

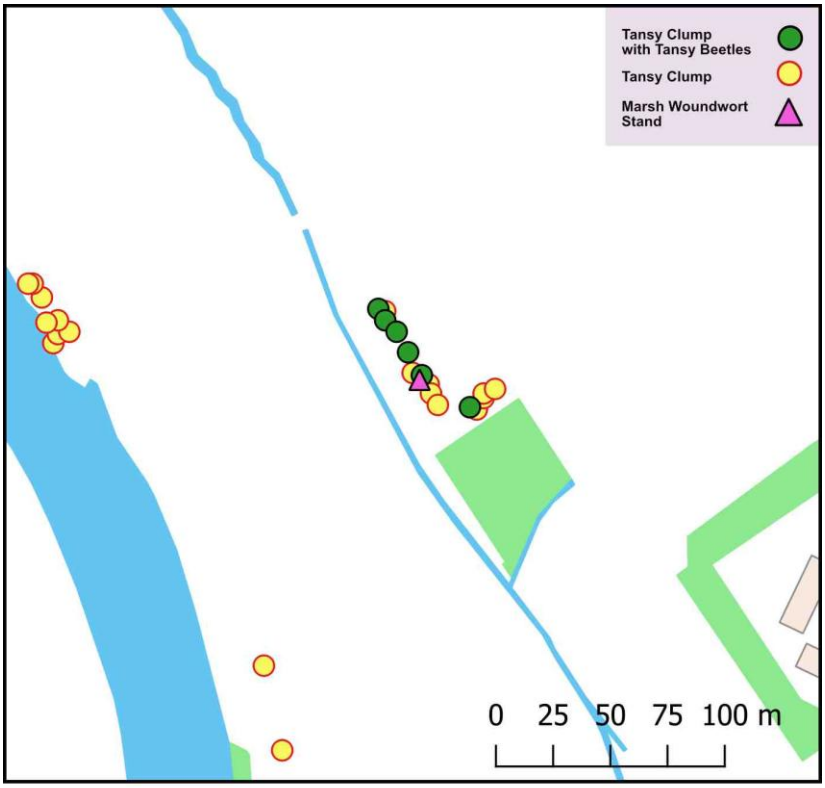
Survey Assessment: -

Survey results for Transect 5 are shown above in **Table 8**.

Locations of Tansy plants and occupied Tansy clumps along Transect 5 are shown in **Figure 8**.

Whilst 2024 produced 9 mixed stands of Tansy and Marsh Woundwort with 109 beetles and one Marsh Woundwort stand without beetles (Louis, 2024), 2025 revealed only one stand of Marsh Woundwort without beetles as shown in **Figure 9**.

Figure 9. Stretch 3a – Stand of Marsh Woundwort without Tansy Beetles and Tansy with and without Tansy Beetles in the north part of Rawcliffe Meadows



Management, threats and changes: -

Even though Tansy Beetle numbers had increased overall, there was evident shading from enlarging willow trees combined with rampant bindweed (*Calystegia* spp.) growth at the Tansy Pond, which is noted for its dense stands of Tansy and a large Tansy Beetle population. This situation was initially reported in 2024, so it represents a growing problem that could influence future Tansy plant and beetle retention at this location. Prolonged flooding in the vicinity of the Blue Beck flood reservoir and Ings Dyke in 2024 may have been responsible for the demise of Tansy plants and hence lack of Tansy Beetles at that location. Despite the above issues the Environment Agency manage the meadows by mowing in October, which gives time for the Tansy Beetles to go undeground to hibernate through the winter

Stretch 4 - Clifton Bridge to Scarborough Bridge

Transect 6a West Bank surveyed by: -

Ben Coulson (Same surveyor as in 2024).

Table 9. Transect 6a West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
West bank	6	0	0	0	4/9/2024	No management
West bank	13	1	3	8%	20/8/2025	No management

Transect 6b East Bank surveyed by: -

Ben Coulson (Same surveyor as in 2024).

Table 10. Transect 6b East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

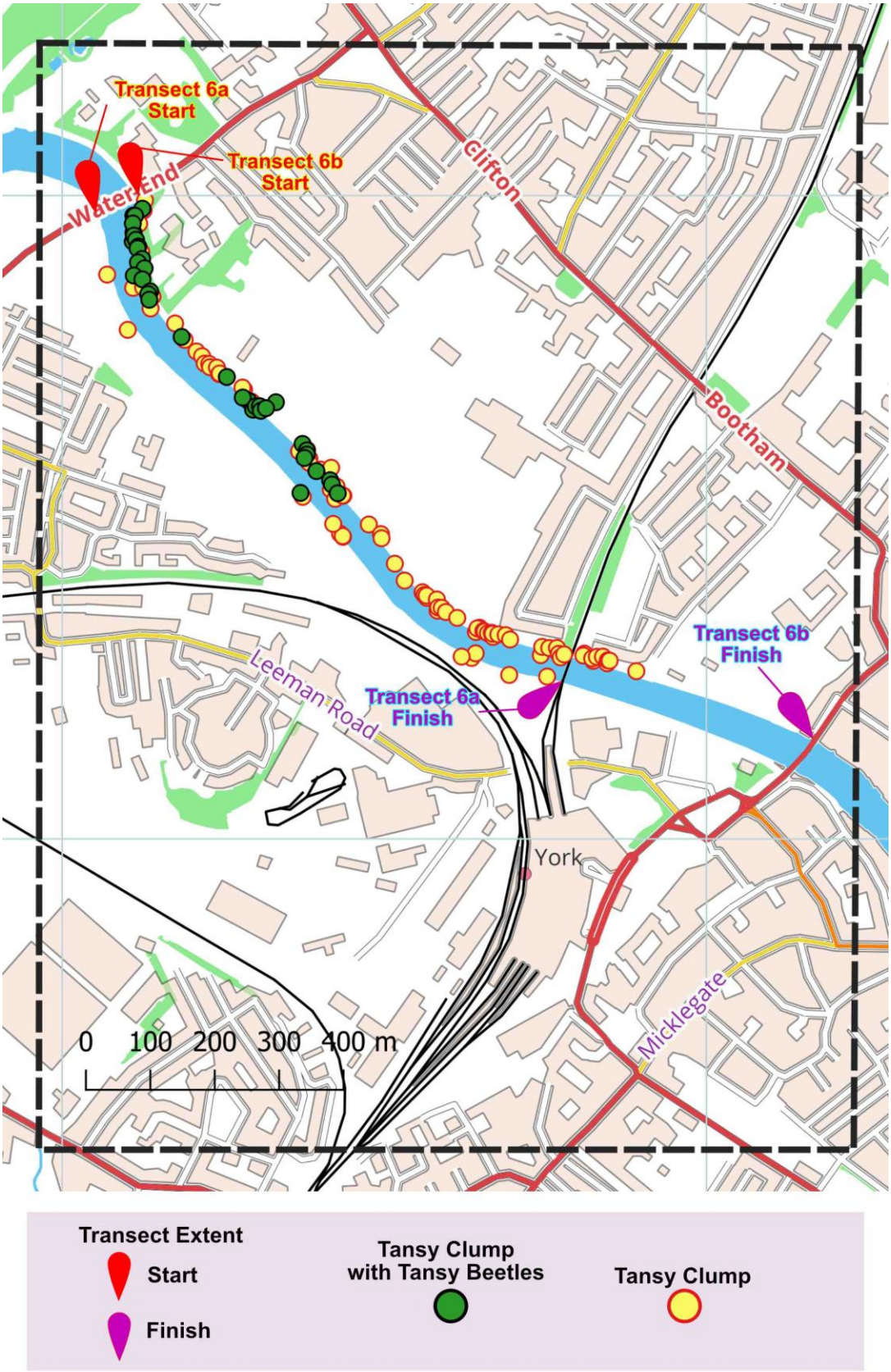
Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	67	32	146	44%	4/9/2024	No management
East bank	123	36	364	29%	20/8/2025	No management

Survey Assessment: -

Survey results for Transect 6a & 6b are shown above in **Table 9 & 10**.

Locations of Tansy plants and occupied Tansy clumps along Transect 6a & 6b are shown in **Figure 10**.

Figure 10. Stretch 4 – Clifton Bridge to Scarborough Bridge



Management, threats and changes: -

Over previous years, the absense of beetles and few Tansy clumps defined the west bank of Transect 6. Much of this can be attributed to the river bank being heavily lined with tall trees creating shady conditions, which are not conducive to Tansy plant proliferation. This problem is further exacerbated by large populations of Himalayan Balsam especially near Scarborough Rail Bridge. Despite this, 2025 yielded 3 beetles on one Tansy clump, which is a notable find in view of the fact the bank has never elicited any Tansy Beetles in previous surveys.

Along the east bank mowing of the grass verges along the riverside footpath along with patches of Bramble (*Rubus* spp.), Bindweed, Rosebay willowherb (*Epilobium angustifolium*) and stands of Himalayan Balsam continue to cause problems for Tansy clump expansion and colonisation. Another issue has been the difficulty in recording Tansy clump size and number, when Tansy patches have no clear divide between them. Despite this, 2025 has shown a substantial increase in Tansy clumps and beetle numbers which is contrary to overall picture seen along the river Ouse.

In previous years the majority of beetles are localised north and south of the St. Peter's Boat House. This changed in 2025 with more located south of the Boat House with evident beetle concentrations associated with areas containing clusters of dumped sods. These sods, comprising a mixture of soil and turf, where deposited in approximately one-metre sized clumps at intervals of roughly four metres. Fresh Tansy growth was emerging from or adjacent to these disturbed patches, and they consistently supported high beetle numbers.

Stretch 5 – Skeldergate Bridge to north of Bishopthorpe

Transect 22 West Bank surveyed by: -

Eva Freegard & Jonathan Day (Same surveyors as in 2024).

Table 11. Transect 22 West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey year	Main management
West Bank	89	43	482	48%	18/8/2024	No management
West bank	92	23	82	25%	23/8/2025	No management

Survey Assessment: -

Survey results for Transect 22 are shown above in **Table 11**.

Locations of Tansy plants and occupied Tansy clumps along Transect 22 are shown in **Figure 11**.

One mixed Marsh Woundwort stand with a Tansy clump was found with 3 resident Tansy Beetles (**Figure 12**).

Figure 11. Stretch 5 – Skeldergate Bridge to north of Bishopthorpe

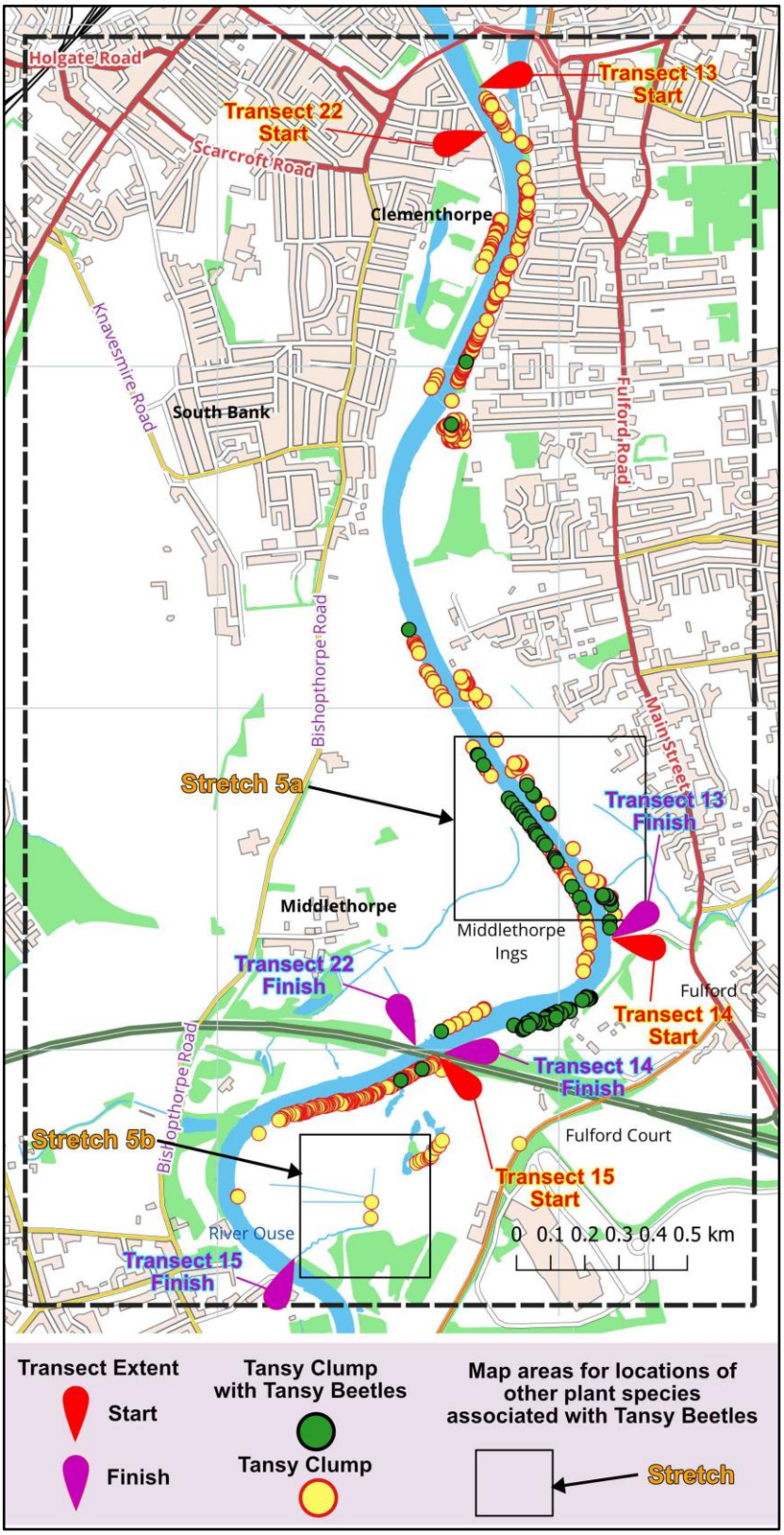
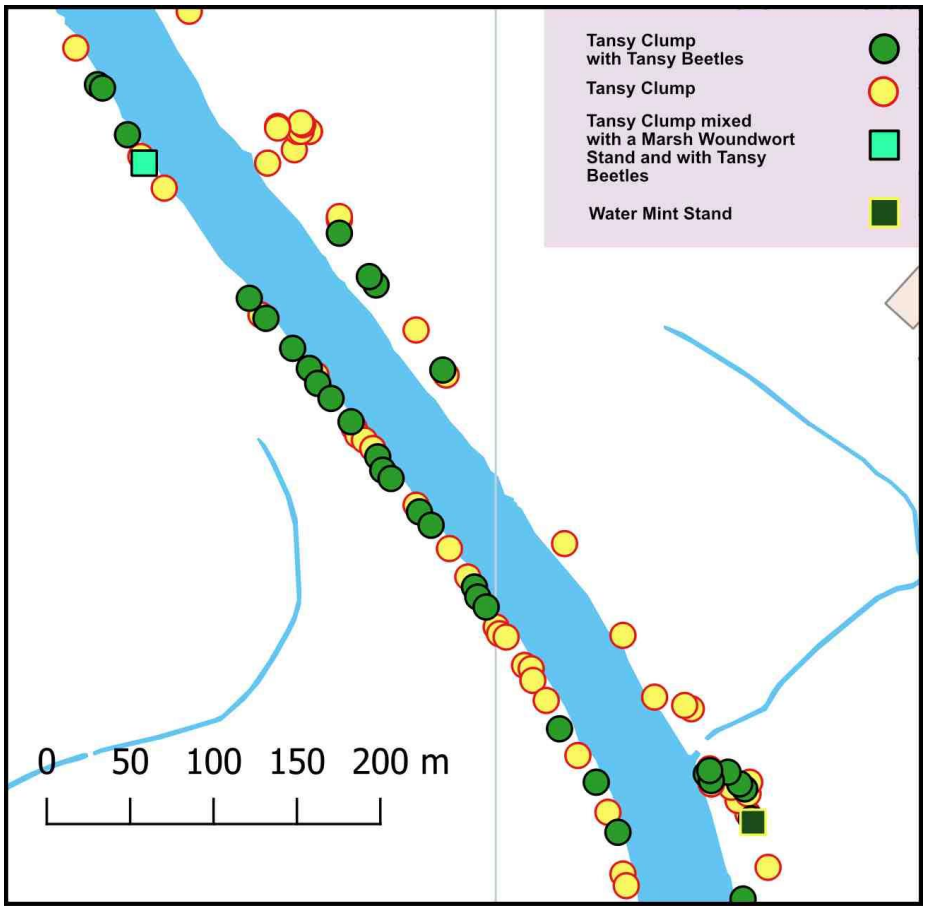


Figure 12. Stretch 5a – Water Mint without Tansy Beetles, mixed stand of Marsh Woundwort and Tansy with Tansy Beetles and Tansy with and without Tansy Beetles near Middlethorpe Ings



Management, threats and changes: -

Although there was an earlier surveyor change in 2020, which can reflect on the numbers counted and determining clump size, the presence of larger Tansy clumps suggests existing clumps may have amalgamated, especially as there were no major management changes. In contrast 2021 was a year of major flood alleviation works by the Environment Agency, which has disturbed the bank vegetation leading to the demise of some Tansy clumps. These works also included wider access points to fishing pegs and path margins being mown, which has also affected some Tansy plants. Himalayan balsam was evident in varying densities along the riverbank and could be expected to also influence Tansy clump growth and proliferation. Certainly, the mowing issue and stands of Himalayan Balsam continued to be a problem in 2022 and 2023 and may have contributed to the reduction in Tansy plants and beetles. 2024 and 2025 has seen more intense competition from Himalayan Balsam, Nettles, Creeping Thistle and Bramble (*Rubus* spp.) along the riverbank, which will likely affect Tansy colonisation and retention. The problem is being further exacerbated by evident shading from adjacent Willows (*Salix* spp.). Despite this, 2024 and 2025 has seen a more sensitive mowing regime along the riverside footpath by York City Council to avoid existing Tansy clumps.

Transect 13 East Bank surveyed by: -

Thilo Winzer (Same surveyor as in 2024) for Transect 13a from Blue Bridge to Millennium Field. Andrew Vevers (Same surveyor as in 2024) for Transect 13b from Millennium Field to Sheep Gate.

Table 12. Transect 13a East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison. Blue Bridge to Millennium Field

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	161	2	5	1%	11/8/2024	No management/mown
East bank	150	2	3	1%	28/8/2025	No management/mown

Table 13. Transect 13b East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison. Millennium Field to Sheep Gate

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	52	5	7	10%	30/8/2024	No management/mown
East bank	56	11	32	20%	11/8/2025	No management/mown

Survey Assessment: -

Survey results for Transect 13 are shown above in **Table 12** and **Table 13**.

Locations of Tansy plants and occupied Tansy clumps along Transect 13 are shown in **Figure 11**.

Although there is a stand of Water Mint not far from the Sheep Gate, no Tansy Beetles were recorded feeding on this plant (**Figure 12**).

Management, threats and changes: -

Certainly in 2022, mention was made of the public recreation area around New Walk and Millennium Bridge in Transect 13a receiving periodic mowing and not necessarily on an annual basis. This mowing was done again in 2023, 2024 and 2025, though it was noted a wild corridor remained along the river bank benefitting a number of Tansy clumps. Mention was made of Fulford Ings in Transect 13b being mowed annually by Natural England, but that does not include Fulford Village Green. It was also noted that Himalayan Balsam dominance was increasing at Fulford Ings. In 2024 and 2025, Himalayan Balsam stands and Bindweed spp. were increasing at the southern end of the Millennium Fields and down into the Fulford Ings area. Certainly in 2024 mention was made of Bindweed spp. covering a number of Tansy plants. In addition, heavy machinery used to repair the sewer in the Fulford Ings locality in 2024 had damaged a few Tansy clumps.

Transect 14 East Bank surveyed by: -

Juliet Koprowska and Ray Haddock (new surveyors for 2025).

Table 14. Transect 14 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	86	63	3241	73%	2024	Sheep grazing
East bank	89	48	469	54%	14 & 31/8/2025	Sheep grazing

Table 15. Transect 14 East Bank Survey Results for the two survey dates 14/8/25 and 31/8/25 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	44	34	440	77%	14/8/25	Sheep grazing
East bank	45	14	29	31%	31/8/25	Sheep grazing

Survey Assessment: -

Survey results for Transect 14 are shown above in **Table 14** and **15**. **Table 14** compares the results from 2024 and 2025. Since the survey was done on the 14th and 31st August the results from the different dates were combined to provide the figures for 2025 as shown in **Table 14**. The results from the different survey dates are shown in **Table 15**. Care needs to be taken in evaluating these results especially as both surveys were done during the period when the Tansy Beetles were rapidly going into hibernation (see **Survey Window Suitability** on **page 55**) and the large gap of 17 days between surveys.

Locations of Tansy plants and occupied Tansy clumps along Transect 14 are shown in **Figure 11.** The Tansy clumps are located in one area (**Figure 11**) running in a west east direction along the riverbank. The easterly half of the Tansy clumps were surveyed on 14th August while the westerly half was done on the 31st August.

Management, threats and changes: -

In 2021 the results were suggesting that well-managed levels of sheep grazing can sustain good populations of beetles and Tansy plants through the landowner applying good animal husbandry, invasive species control and wider land management. However, the low results for 2022 implied that other factors could be at play here, such as the very dry conditions experienced through the summer months or surveyor changes. Himalayan Balsam could also be a problem, though it was only present in patches along the river bank mainly at the northern end of the transect and also centrally by a perimeter wall to a private property. The most noticeable differences in 2023 were a wetter summer and the annual mow of the field had still not occurred by 7th September when the survey was completed. In contrast 2024 has seen Himalayan Balsam becoming a major problem and the meadows were mown in May with loss of some Tansy clumps. Regarding 2025, Himalayan Balsam was reported as not being an issue and there was no evidence provided that the yearly mowing had affected the Tansy clumps.

Transect 15 East Bank surveyed by: -

Richard Baker and Jo Baker (Same surveyors as in 2024).

Table 16. Transect 15 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East Bank	150	77	301	51%	18 & 21/8/2024	Sheep grazing
East Bank	192	2	2	1%	24/8/2025	Sheep grazing

Survey assessment: -

Survey results for Transect 15 are shown above in **Table 16**. Beetles surveyed was done on the 24th August and Tansy plants surveyed on 26th September. The Tansy distribution and clump size were similar to previous years. When surveyed, many of the Tansy plants were brown or silvery but there were Tansy plants with flowers and green leaves in most clumps, especially near the river bank with green regrowth and especially in the field where they had been inadvertently mown. The large numbers of beetles observed along this transect in July before the surveying period suggests that if surveyed earlier the numbers would have been more representative.

Locations of Tansy plants and occupied Tansy clumps along Transect 14 are shown in **Figure 11**.

One large stand of Marsh Woundwort was found in the ditch draining the Gollie Ponds (**Figure 13**).

Management, threats and changes: -

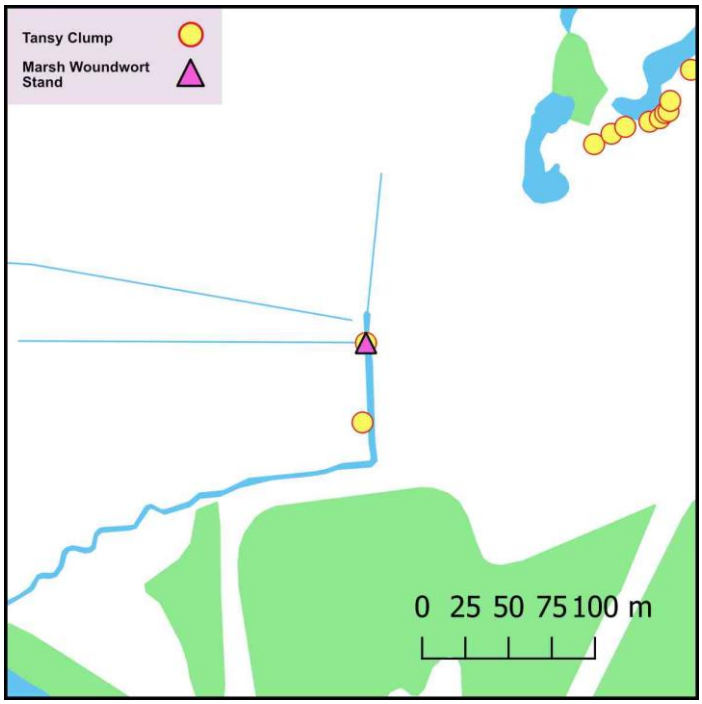
In 2021 Carstairs Countryside Trust decided that land management changes were required to reduce the collateral damage sustained by Tansy plants when nearby brambles on the river bank were flailed to reduce their spread and also the loss of Tansy plants during hay making in the north-western part of the meadow. Although Tansy plants can regrow after such activities, it was not always accompanied by Tansy Beetle colonisation, thus the following measures were introduced: -

- Attempt filling gaps in the Tansy plant patches to expand the distribution of the Tansy beetle further west along the river bank away from the Ring Road area.
- Confine bramble clearance to periods outside the Tansy growing season and demarcate Tansy areas more clearly to avoid their loss.
- Try to replace sheep with cattle after the haymaking.

Certainly 2022 had seen a notable rise in Tansy Beetle numbers suggesting that the conservation measures mentioned above were improving the situation. In 2023 the decrease in Tansy clumps was attributed to the presence of more “very large” Tansy clumps (three metres or more in size). Moving forward to 2024 the reduced numbers of Tansy clumps and beetle numbers may be a reflection of more rampant growth of Bramble (*Rubus* spp.) and Himalayan Balsam. This situation also prevailed in 2025 and included fallen Willow branches shading some of the Tansy clumps. In addition it was noted that during haymaking in 2024 and 2025, the large Tansy clumps growing away from the river bank in the north-western part of the meadow had been inadvertently cut by the farmer. This cutting also included a few Tansy clumps growing along the ditch draining the Gollie Ponds, while the Marsh Woundwort had mostly been covered in mud from ditch dredging or outcompeted by *Glyceria* spp (Sweet-grass).

As in 2022, the surveying in 2023 was not restricted to the river banks, but also included the area around the Gollie Ponds and the small ditch draining the Gollie Ponds to the southwest which flows into the Ouse at the south end of Transect 15. In the aforementioned years, Tansy beetles were found on Marsh Woundwort growing along the banks of the ditch in the flood plain meadow. Unfortunately, in 2024, as noted above, during haymaking, Tansy clumps in the meadow had been cut and the dredging of the ditch draining the Gollie Ponds had covered most of the vegetation to the west of the ditch in a thick layer of mud. The dredging together with the evident spread of Reed Sweet-grass (*Glyceria maxima*) in and around the ditch were most likely to have been responsible for the decline in Marsh Woundwort to the one stand observed in 2024 and 2025 (**Figure 13**).

Figure 13. Stretch 5b – Marsh Woundwort stand and Tansy clumps without Tansy Beetles in the Gollie Ponds area



Stretch 6 – Bishopthorpe to Acaster Selby

Transect 23 West Bank surveyed by: -

Peter Mayhew (Same surveyor as in 2024).

Table 17. Transect 23 West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clump	Beetle count	Occupancy value	Survey date	Main management
West bank	148	54	287	36%	19/8/2024	Mown
West bank	186	33	249	18%	11/8/2025	Mown

Survey Assessment: -

Survey results for Transect 23 are shown above in **Table 17**.

Locations of Tansy plants and occupied Tansy clumps along Transect 23 are shown in **Figure 14.**

Whilst 2024 saw 5 stands of Marsh Woundwort containing 31 feeding Tansy Beetles, the situation changed in 2025 with no Marsh Woundwort present.

Management, threats and changes: -

This transect is mainly a mown area with boat moorings and the beetles are very much confined to key locations along this transect (**Figure 14**), thereby raising the question of what causes the beetle to occur in such distinct spots. It was also noted that Himalayan Balsam was occurring in dense stands along this transect and thus could be influencing the distribution and potential spread of Tansy plants. In 2023, the mowing of the river bank spread to two new areas leading to the demise of previously recorded Tansy plants that normally contained Tansy Beetles. Himalayan Balsam growth surged in 2024 with Bishopthorpe Ings and Church Ings SINC (Sites of Importance for Nature Conservation) particularly affected. In 2025 Himalayan Balsam was dominant everywhere. The former site also suffered from reduced hay cuts and flooding. The aforementioned factors may have contributed to the reduced numbers of Tansy Beetles recorded in 2024 and 2025. However, it has been noticed in the past when the hay cutting was done Tansy Beetles seemed to like the fresh regrowth.

A 2-metre-wide patch of Japanese Knotweed (*Reynoutria japonica)* occurs along this transect and is mown/strimmed to keep it under control.

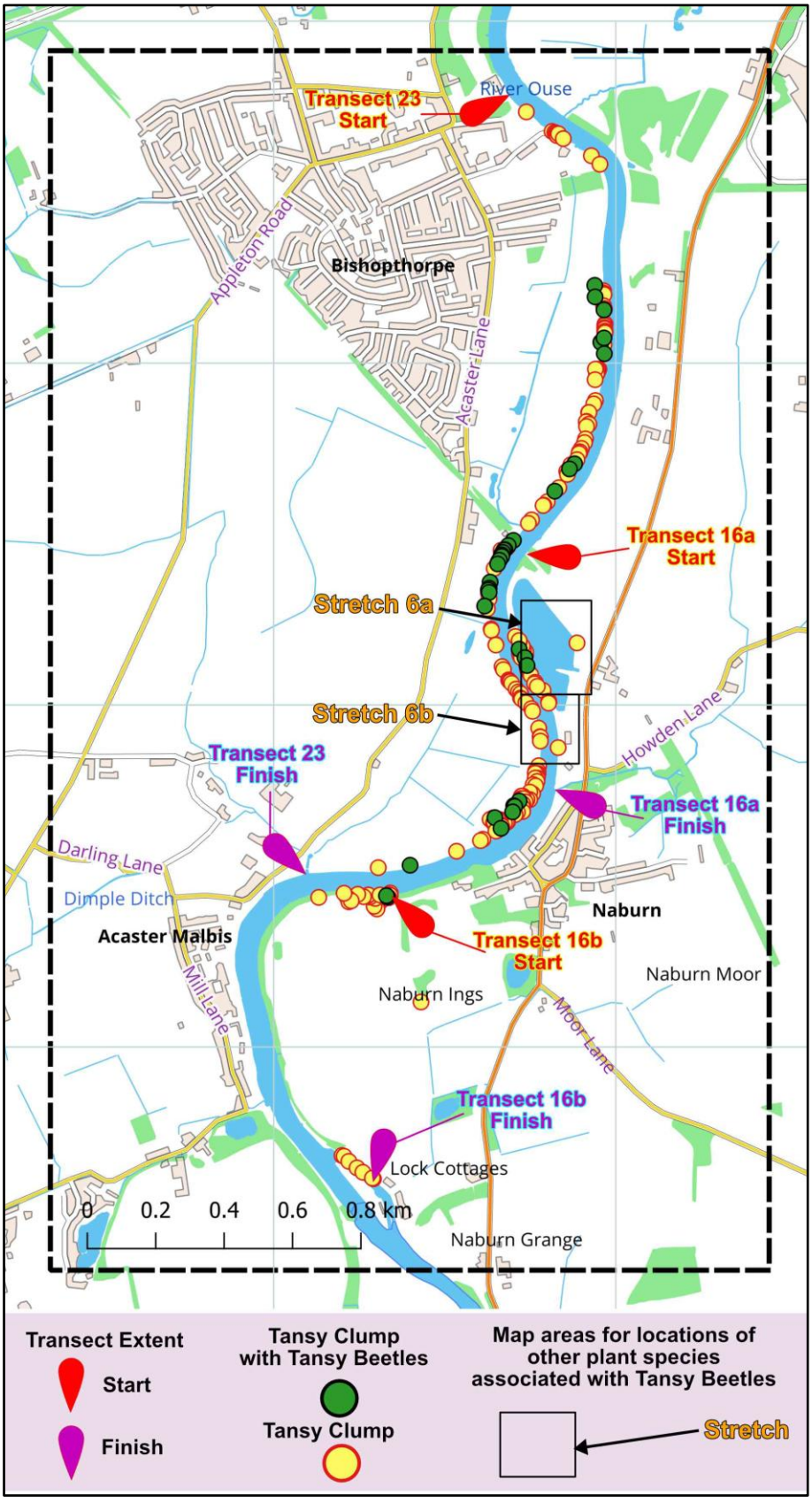
Transect 16 East Bank surveyed by: -

Vicky Wilkins (York Marina Transect 16a) - Same surveyor as in 2024.
Sean Gregory-Ling (South of Naburn to Naburn Lock 16b) - Same surveyor same as in 2024.

Table 18. Transect 16a East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clump	Beetle count	Occupancy value	Survey date	Main management
East bank	38	3	9	8%	28/8/2024	Mown
East bank	27	3	8	11%	15/8/2025	Mown

Figure 14. Stretch 6 – Bishopthorpe to Acaster Selby



Survey Assessment: -

Survey results for Transect 16a are shown above in **Table 18**.

Locations of Tansy plants and occupied Tansy clumps along Transect 16a are shown in **Figure 14**.

Gipsywort, Marsh Woundwort and Water Mint, which are potential food plants for Tansy Beetles, were present in and around the York Marina **(Figure 15, 16**). Comparisons between 2024 and 2025 showed more Tansy Beetles on alternative food plants in 2025 (**Table 19**). Furthermore, 2025 also yielded mixed foodplant species with and without Tansy Beetles present (**Table 19**) which did not feature in 2024.

Table 19. Transect 16a East Bank Survey Results for alternative food plants with their associated Tansy Beetle numbers in 2024 and 2025 (grey highlight) for comparison

	2024	2025
Marsh Woundwort with Tansy Beetles	1 stand 4 beetles	1 stand 1 beetle
Marsh Woundwort without Tansy Beetles	11 stands	4 stands
Water Mint with Tansy Beetles	1 stand 2 beetles	
Water Mint without Tansy Beetles	12 stands	3 stands
Water Mint & Marsh Woundwort Mix with Tansy Beetles		1 stand 4 beetles
Water Mint & Marsh Woundwort Mix without Tansy Beetles		1 Stand
Gipsywort without Tansy Beetles	13 stands	
Gipsywort with Tansy Beetles		1 stand 3 beetles
Gipsywort & Marsh Woundwort		1 stand 1 beetle
Gipsywort, Marsh Woundwort & Water Mint with Tansy Beetles		1 stand 3 beetles
Gipsywort, Marsh Woundwort & Water Mint without Tansy Beetles		1 stand

Management, threats and changes: -

The main issue at York Marina is the regular mowing of the Marina banks and competition with Nettles which keeps the number of Tansy clumps low and mainly confined to the river bank separating the river from the Marina. Regarding the Tansy Beetles, they are restricted to food plants along the river bank.

Table 20. Transect 16b East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total Clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
West bank	43	21	85	49%	28/8/2024	Hay production, Sheep Grazing
West bank	40	2	3	5%	30/8/2025	Hay production, Sheep Grazing

Figure 15. Stretch 6a - Marsh Woundwort, Water Mint and Gipsywort without Tansy Beetles along with Tansy with and without Tansy Beetles at York Marina

Survey Assessment: -

Survey results for Transect 16b are shown above in **Table 20**.

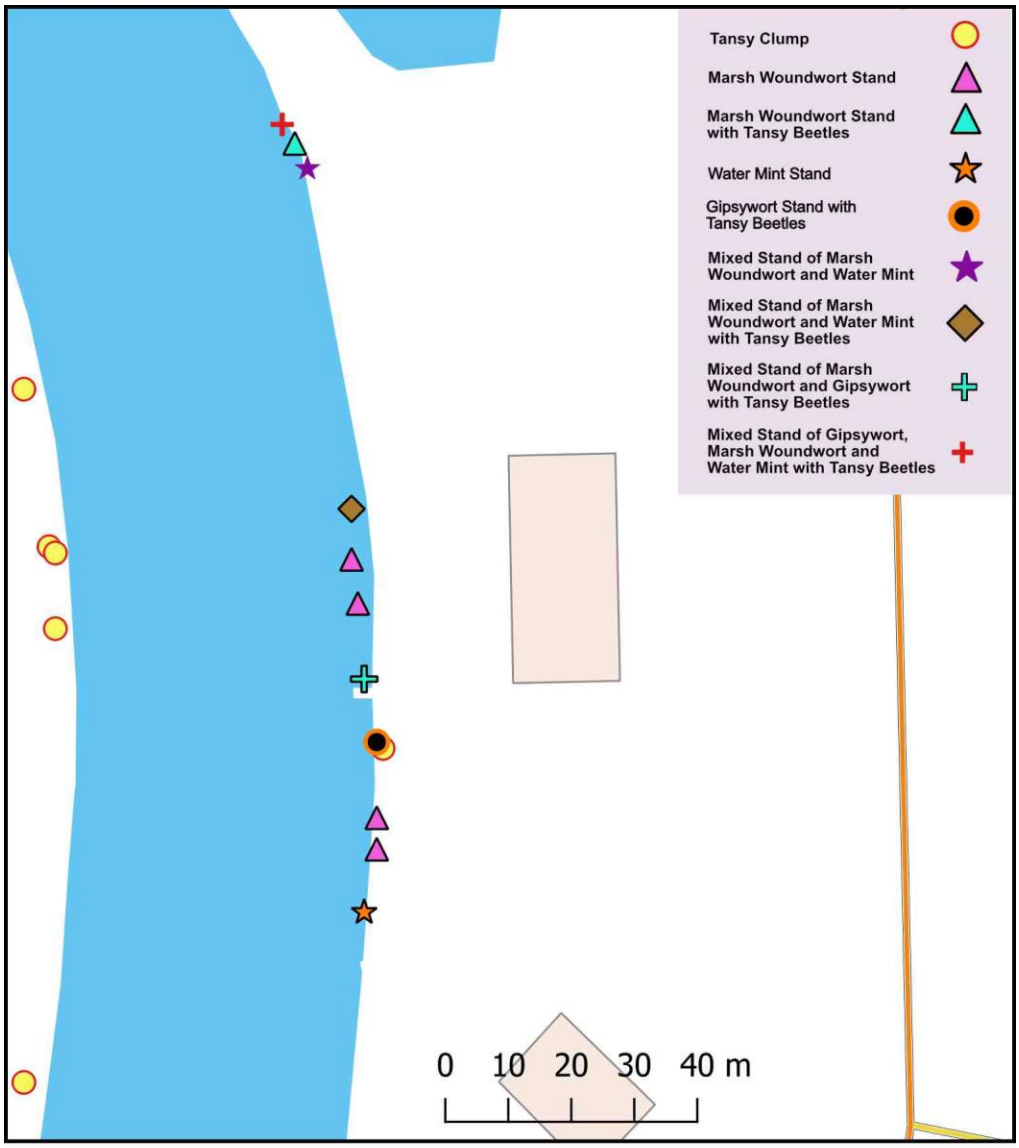
Locations of Tansy plants and occupied Tansy clumps along Transect 16b are shown in **Figure 14**.

Management, threats and changes: -

The majority of the beetles reside in the northern part of the transect that consist of wild areas not managed by the Canal & River Trust. Further south, the banks contain dense areas of Himalayan Balsam and Willow (*Salix* spp.) unsuitable for Tansy colonisation. In addition, and throughout the transect, the river banks also have extensive stands of Mugwort (*Artemisia norvegica*) and Great Willowherb (*Epilobium hirsutum*) which may further hinder colonisation by Tansy. Certainly in 2023 the vegetation had really grown due to the wet summer and the tall Mugwort stands were very

dominant and looked to be outcompeting the resident Tansy clumps. Regarding 2024 the problem with Great Willowherb and Himalayan Balsam remains unchanged and closer to Naburn Lock frequent mowing of the river bank is a continuing problem hindering possible Tansy colonisation. Certainly in 2025 towards Naburn Lock the Himalayan Balsam was very extensive again.

Figure 16. Stretch 6b – Various single stands and mixed stands of Marsh Woundwort, Water Mint and Gipsywort with and without Tansy Beetles, along with Tansy without Tansy Beetles south of York Marina



Stretch 7 – Acaster Malbis to Acaster Selby

Transect 24 West Bank surveyed by: -

Douglas Louis (Same surveyor as in 2024).

Table 21. Transect 24 West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total Clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
West bank	289	218	5788	75%	7,10,11 & 13/8/2024	Hay production, Sheep Grazing
West bank	341	151	1143	44%	10,11 & 12/8/2025	Hay production, Sheep Grazing

Survey Assessment: -

Survey results for Transect 24 are shown above in **Table 21**.

Locations of Tansy plants and occupied Tansy clumps along Transect 24 are shown in **Figure 17**.

2024 produced 4 stands of Marsh Woundwort with 41 Tansy Beetles. This changed markedly in 2025 with only 3 of the aforementioned stands surviving yielding 2 beetles and the emergence of a new mixed stand of Tansy and Marsh Woundwort with one beetle in the northernmost field of South Ings (**Figure 18, 19**). In addition, a drainage ditch running on the east side of Hales-Hill Farm chalet park was explored in 2025 (**Figure 19**) and yielded 3 very large Marsh Woundwort stands and one mixed with Tansy, but none contained Tansy beetles.

Management, threats and changes: -

Permission granted from the Environment Agency enabled access onto a section of the west bank adjacent to Naburn Locks in 2024. Eight Tansy plants were found adjacent to the outermost water chanel west of the fish pass. Two of these Tansy plants had a total of five Tansy Beetles. In 2025 at the same location, 10 Tansy clumps were found with 3 clumps containing 9 beetles. In addition 4 stands of Japaneses Knotweed were spotted nearby, but at present were not considered a threat to the Tansy clumps.

The northernmost section of the transect (**Figure 17**) in South Fields (South Ings) has raised flood defence earthworks on which the Tansy plants grow and these plants in 2022 showed stunting with shrivelled flower buds indicative of very dry soil conditions pertaining through the summer months. That changed in both 2023 and 2024 with the Tansy growing taller with more leaf and showing healthy flowerheads. However the dry summer in 2025 again produced similar symptoms in the Tansy plants as seen in 2022. The field northeast of Hales-Hill Farm has a past history of intensive cattle grazing which destroyed the Tansy plants on the river bank slope. This situation was repeated in 2022 with beetles trying to survive on plants largely stripped of their leaves. All this changed again in 2023 and 2024 with no obvious signs of grazing by stock when the survey was done. However the situation reverted back in 2025 to cattle grazing the river bank and eating the Tansy plants.

Figure 17. Stretch 7 – Acaster Malbis to Acaster Selby

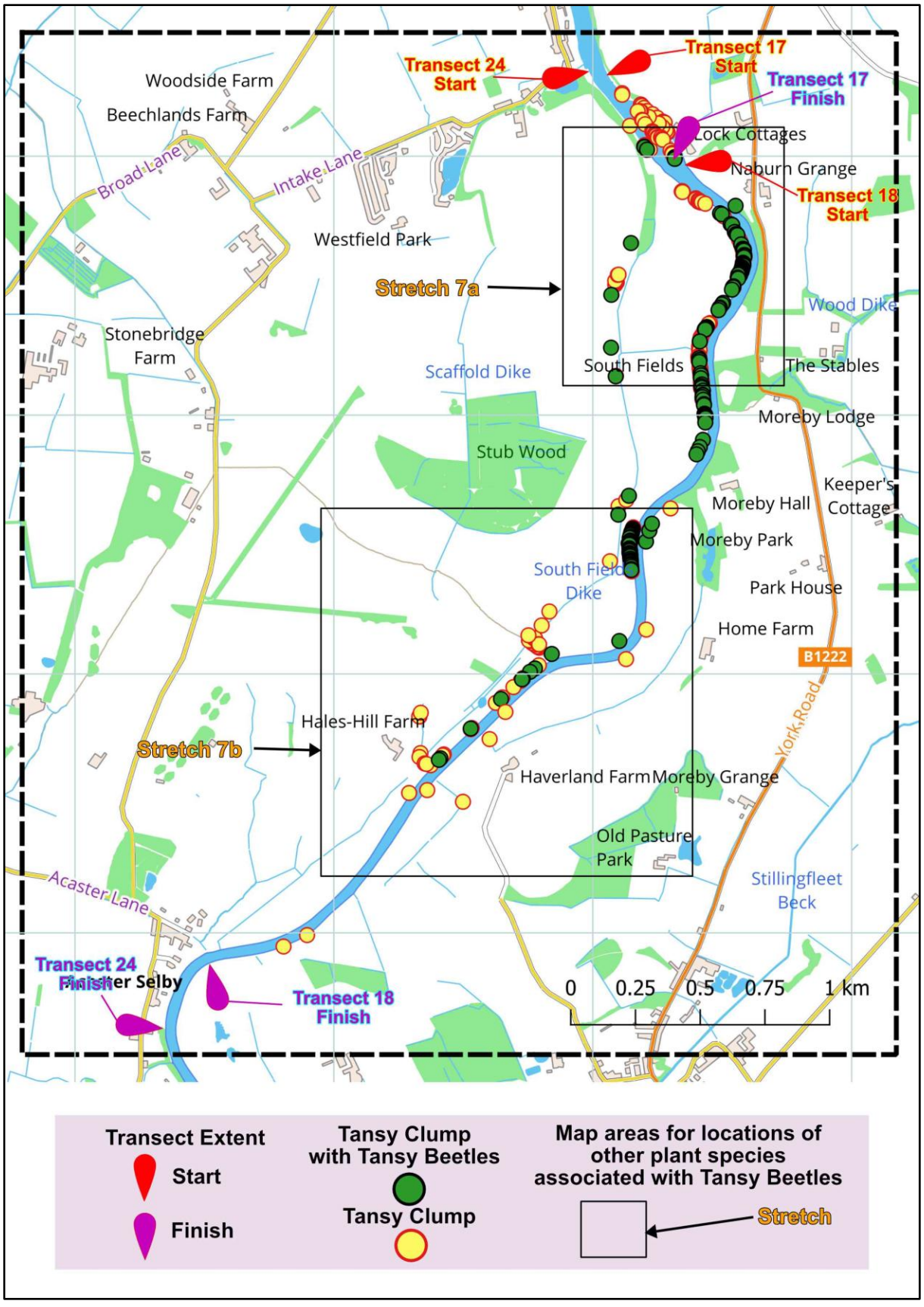
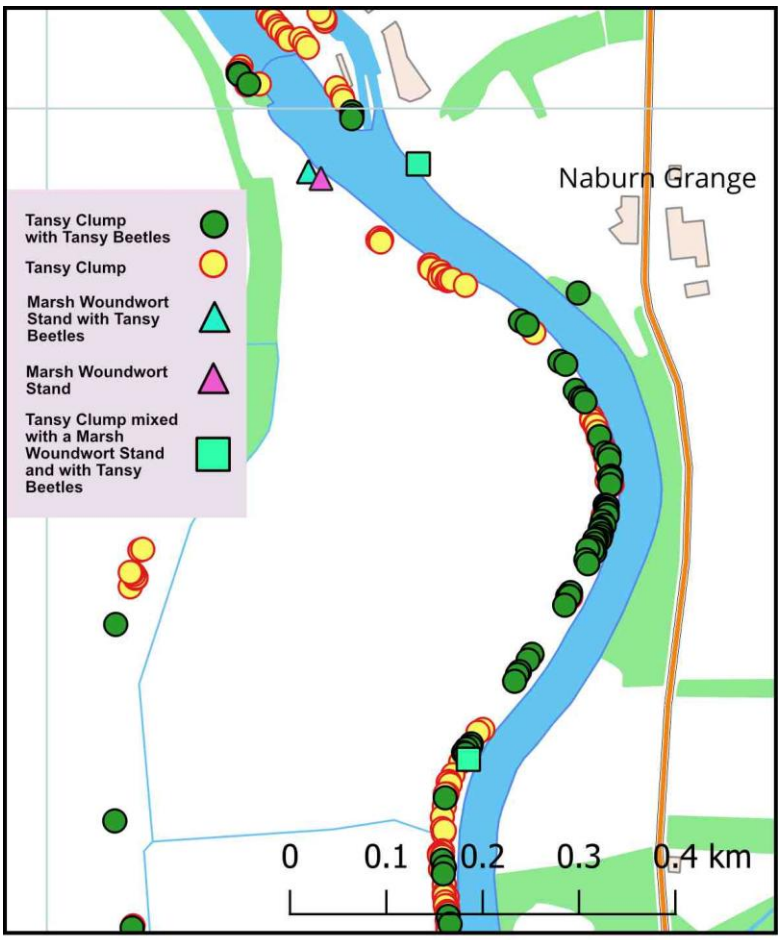


Figure 18. Stretch 7a – Marsh Woundwort with and without Tansy Beetles, mixed Marsh Woundwort and Tansy stand with Tansy beetles and Tansy with and without Tansy Beetles (opposite Naburn Locks)



Just south and adjacent to the Hales-Hill Farm Water Ski Club a large number of Tansy plants were spotted amongst rapidly developing Willow (*Salix* spp.) saplings for the first time in 2023 but had no Tansy Beetles. This changed in 2024 with the Willow (*Salix* spp.) saplings shading out the Tansy plants leaving a few etiolated sickly specimens. In 2025 one new large Tansy clump was spotted just south of the aforementioned area.

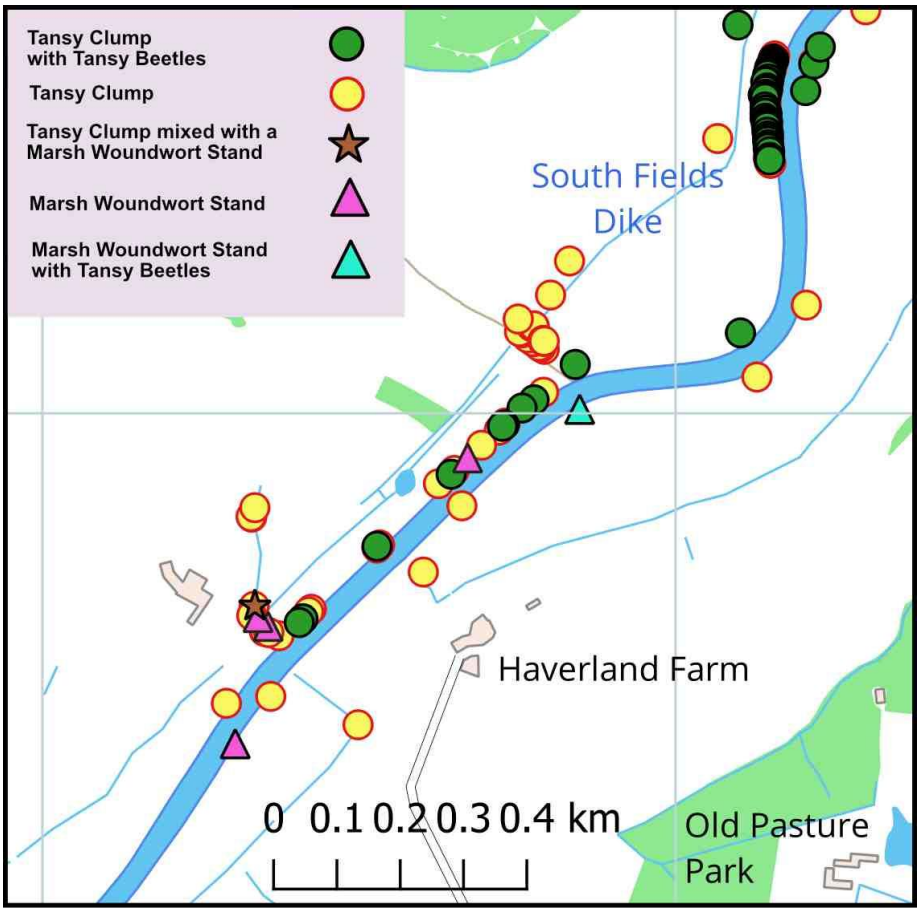
A first time exploration by the current surveyor of a long rough bank running in a north south direction and which is part of the South Fields area, west of South Fields Dyke and adjacent to South Ings (**Figure 17**) revealed 22 Tansy clumps of which 6 had 15 Tansy Beetles in total. The majority of the Tansy clumps in South Fields were medium to large in size and very compact despite being stunted due to the dry conditions prevailing at the time.

Another first time exploration was also done along Scaffold Dyke running along the east side of Hales-Hill Farm Chalet Park and a number of Tansy clumps and Marsh Woundwort stands were observed but without any Tansy beetles feeding on them (**Figure 19**).

The southern part of the transect, beyond the Water Skiing Centre at Hales-Hill Farm (**Figure 17**) and going downstream, is largely dominated by Himalayan Balsam, making Tansy colonisation

difficult. Further downstream and approaching Acaster Selby, the fields are heavily stocked with sheep and in 2024 only one Tansy clump remains in a ditch which was difficult for the sheep to reach. This clump disappeared in 2025. The sheep grazing is so intensive the river banks are now devoid of Himalayan Balsam.

Figure 19. Stretch 7b – Marsh Woundwort with and without Tansy Beetles, mixed Marsh Woundwort and Tansy stand without Tansy Beetles and Tansy with and without Tansy Beetles north of Haverland Farm



Transect 17 East Bank surveyed by: -

Andrew Vevers (Same surveyor as in 2024).

Table 22. Transect 17 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total Clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	52	2	3	4%	25/8/2024	Mown
East bank	47	3	4	6%	14/8/2025	Mown

Survey Assessment: -

Survey results for Transect 17 are shown above in **Table 22**.

Locations of Tansy plants and occupied Tansy clumps along Transect 17 are shown in **Figure 17**.

Management, threats and changes: -

East Bank, near Naburn Lock is managed by the Canal and River Trust who oversee the boat moorings and regularly mow the grassland areas. Despite this, the area has a number of small Tansy clumps which increased from 43 in 2022 to 53 in 2023 and then reduced to 52 in 2024 and then 47 in 2025. Up to 2023, Tansy Beetles have never been recorded on this transect, which includes the riverbank leading up to the locks and the island which is part of the lock system.

In view of the absence of any Tansy Beetles along this transect over the years and the presence of several suitable Tansy clumps for colonisation on the island, discussions with the Canal & River Trust enabled an "educational" introduction of Tansy Beetles to be considered. 50 unsexed beetles collected from around Fulford Picnic area were released on the island on the 30th August 2023. Surveys in 2024 and 2025 yielded 3 and 4 beetles respectively (**Table 20**).

Dense stands of Himalayan Balsam also occur along the riverbank leading up to the locks.

Transect 18 East Bank surveyed by: -

Vicky Wilkins and Rachel Midgley (Same surveyors as in 2024).

Table 23. Transect 18 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total Clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	16	6	44	38%	7/8/2024	Grazing Cattle, Mown
East Bank	15	4	14	27%	14/8/2025	Grazing Cattle, Mown

Survey Assessment: -

Survey results for Transect 18 are shown above in **Table 23**.

Locations of Tansy plants and occupied Tansy clumps along Transect 18 are shown in **Figure 17**.

In 2024, 8 stands of Marsh Woundwort with 4 stands containing 18 beetles were located along transect 18. This changed in 2025 with only two stands of Marsh Woundwort, one of which contained a single beetle (**Figure 19**). A third mixed stand of Marsh Woundwort and Tansy was also found but without Tansy Beetles (**Figure 18**).

Management, threats and changes: -

It is quite likely that the existing land management of mowing and grazing probably prevented any substantial increase in beetle numbers in 2023 and 2024. Certainly in 2022, it was noted that a Tansy clump close to the Naburn Lock outlet had been strimmed. Earlier in 2021 there were signs of herbicide spraying close to the bank which may have slowed any recovery in 2022 and subsequent years. Finally Himalayan Balsam was abundant throughout the transect. In 2025 electric fencing was used to control where the cattle could graze and certainly helped the Tansy to flourish, but this situation was only temporary. It was noted that in areas where hay making was conducted, Tansy clumps prospered if they were outside the cut areas.

Himalayan balsam occurred in significant amounts and was dominant throughout the transect.

Stretch 8 – Stillingfleet to Cawood

Transect 25 West Bank surveyed by: -

Barry Graham (Same surveyor as in 2024).

Table 24. Transect 25 West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
West bank	17	3	3	18%	6/9/2024	Grazing Cattle, Sheep & Horses
West bank	10	0	0	0	2/9/2025	Grazing Cattle, Sheep & Horses

Survey Assessment: -

Survey results for Transect 25 are shown above in **Table 24**.

Locations of Tansy plants and occupied Tansy clumps along Transect 25 are shown in **Figure 20**.

Management, threats and changes: -

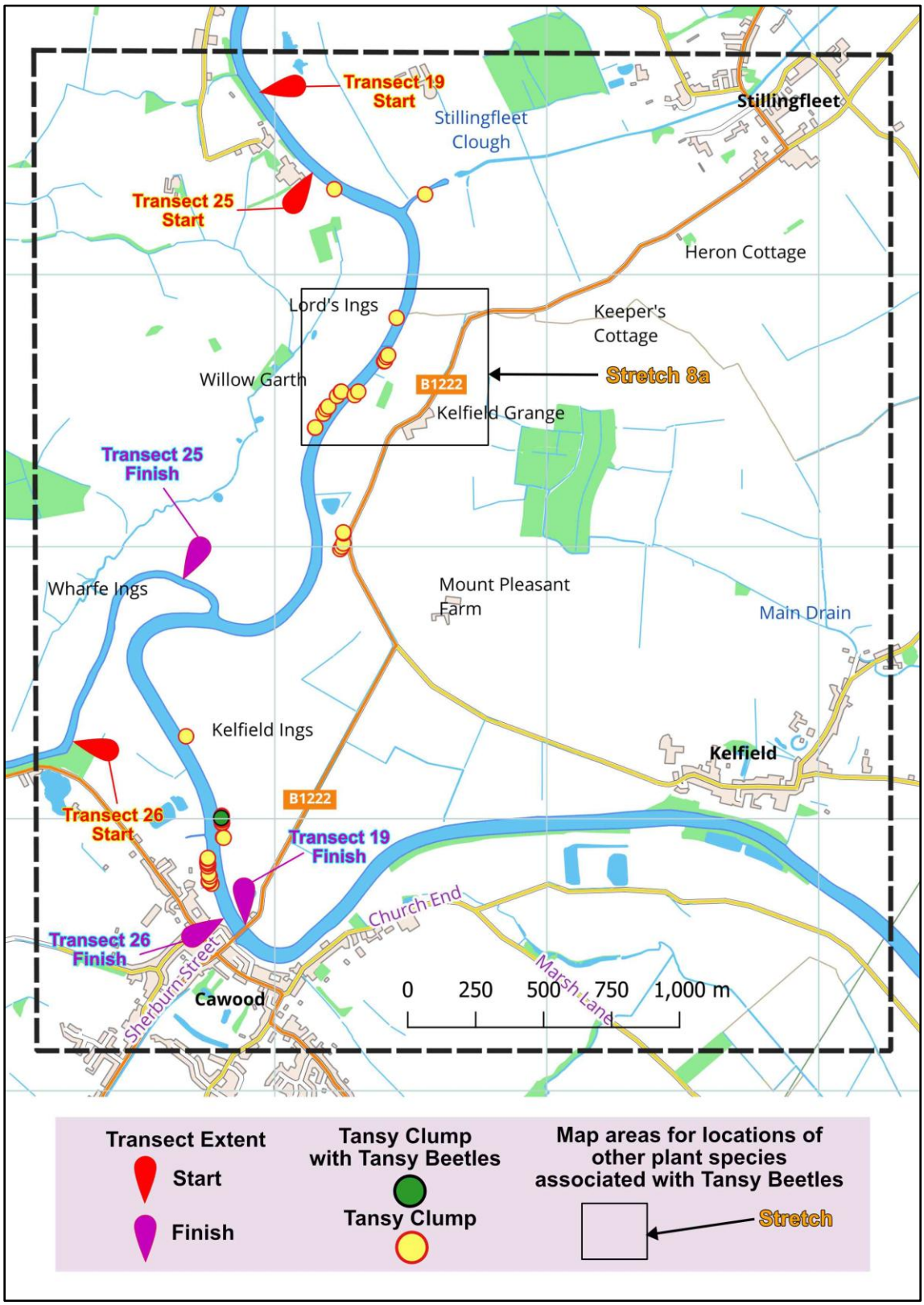
2020 saw a major reduction to 10 Tansy clumps with only one occupied with two beetles. This was much lower than in previous years and may have been due to altered land management, where grazing by cattle has partly changed to sheep. This land management regime continued in 2021 and resulted in no beetles being recorded, although the number of Tansy clumps did increase to 15. When 2022 is considered, the picture changes for the better with an increase to 17 Tansy clumps containing 14 Tansy beetles. However, from 2023 the picture deteriorates with 20 Tansy clumps and 1 beetle in 2023, then 17 clumps and 3 beetles in 2024 and finally 10 clumps and no beetles in 2025.

The changes in 2023 onwards may be attributed to more cattle being present along with some sheep and horses.

In recent years the riverbank has shown signs of erosion making assessment of Tansy plants on the bank slope difficult. Himalayan balsam patches were evident in some locations along with extensive stands of Rosebay Willowherb (*Epilobium angustifolium*). Because of the erosion issue reported in 2022, major works had started in 2023 to control the problem along the mid-section of the transect and may have led to the demise of some of the Tansy clumps. Substantial erosion of the river bank was noticed again in 2025 and attempts had been made to reduce it through positioning of boulders at strategic locations.

Male Tansy Beetle found on vegetation with extruded aedaegus, that could be related to difficulties encountered when attempting to emerge from the soil during the summer drought experienced in 2025. Likewise the detritus attached to the aedaegus suggests faecal matter emanating from but not detaching from the beetle's anus.

Figure 20. Stretch 8 – Stillingfleet to Cawood



Transect 26 West Bank surveyed by: -

James Wildash and David Moss (Same surveyors as in 2024).

Table 25. Transect 26 West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
West bank	15	0	0	0	17/8/2024	Grazing Sheep
West bank	13	0	0	0	1/9/2025	Grazing Sheep

Survey Assessment: -

Survey results for Transect 26 are shown above in **Table 25**.

Locations of Tansy plants along Transect 25 are shown in **Figure 20**.

Management, threats and changes: -

Transect 26 showed little change when 2025 is compared with 2024. However as in previous years no beetle colonisations were observed in 2025. Most of the bank is left wild with only a small stretch close to Cawood being mowed.

In 2025 the Tansy plants were being overgrown by Himalayan Balsam, Nettles, Brambles and other plant species.

Transect 19 East Bank surveyed by: -

Vicky Wilkins & Rachel Midgley (Same surveyors as in 2024).

Table 26. Transect 19 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	64	32	115	50%	7/8/2024	Mown
East bank	26	1	1	4%	14/8/2025	Mown

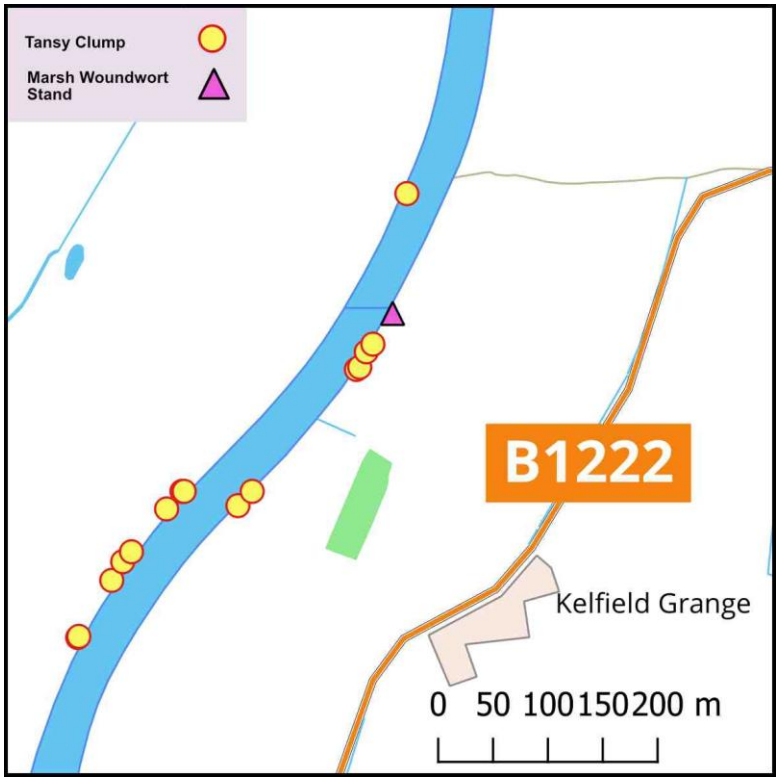
Survey Assessment: -

Survey results for Transect 19 are shown above in **Table 26**.

Locations of Tansy plants and occupied Tansy clumps along Transect 19 are shown in **Figure 20**.

One Marshwoundwort stand without Tansy beetles was located along this transect (**Figure 21**).

Figure 21. Stretch 8a – Marsh Woundwort and Tansy without Tansy Beetles west of Kelfield Grange



Management, threats and changes: -

Survey results for 2021 indicated that the mixed land management, predominantly mowing with some grazing and arable use, along with high levels of invasive species such as Japanese Knotweed and Himalayan Balsam, are leading to a gradual loss of Tansy clumps and beetles. Certainly in 2025 Himalayan Balsam was dominant throughout and in significant quantities. However, an examination of **Table 31** in chapter "**Numbers**" shows a more dynamic picture with beetle and Tansy plant numbers fluctuating markedly over the years with the results in 2024 and 2025 reflecting this situation.

Stretch 9 – Cawood to Riccall

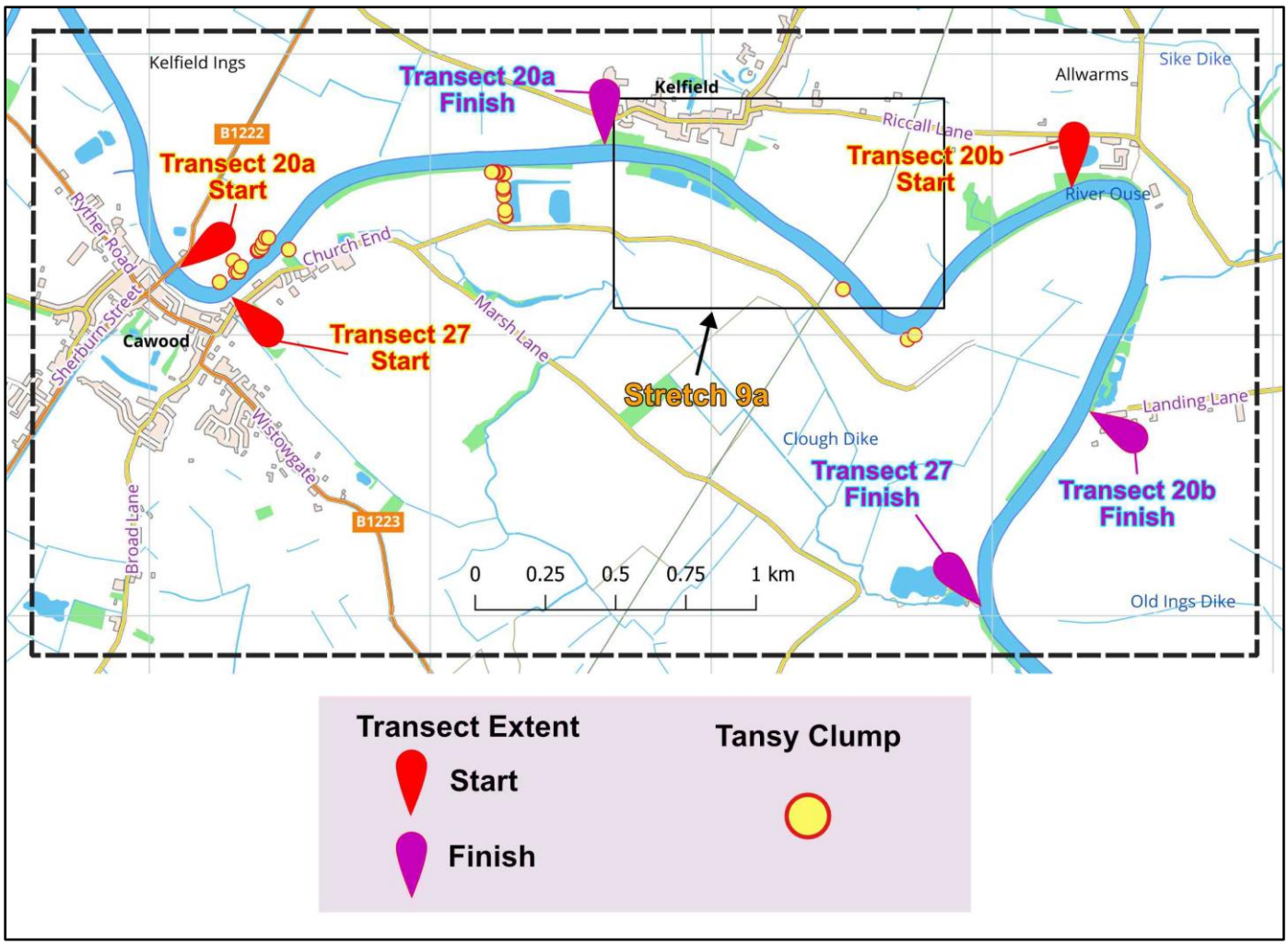
Transect 27 West Bank surveyed by: -

Miranda Dunstan and Nicola Ward (New surveyors in 2025).

Table 27. Transect 27 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
West bank	20	0	0	0	20/8/2024	No management
West bank	16	0	0	0	13/8/2025	No management

Figure 22. Stretch 9 – Cawood to Riccall



Survey Assessment : -

Survey results for Transect 27 are shown above in **Table 27**.

Locations of Tansy plants along Transect 25 are shown in **Figure 22**.

Marsh Woundwort seems to disappear and then reappear. Thus 6 Marsh Woundwort stands and one Water Mint stand were present in 2023. No alternative food plants were observed in 2024 but in 2025, 13 Marsh Woundwort plants were recorded, but without any beetles (**Figure 23**).

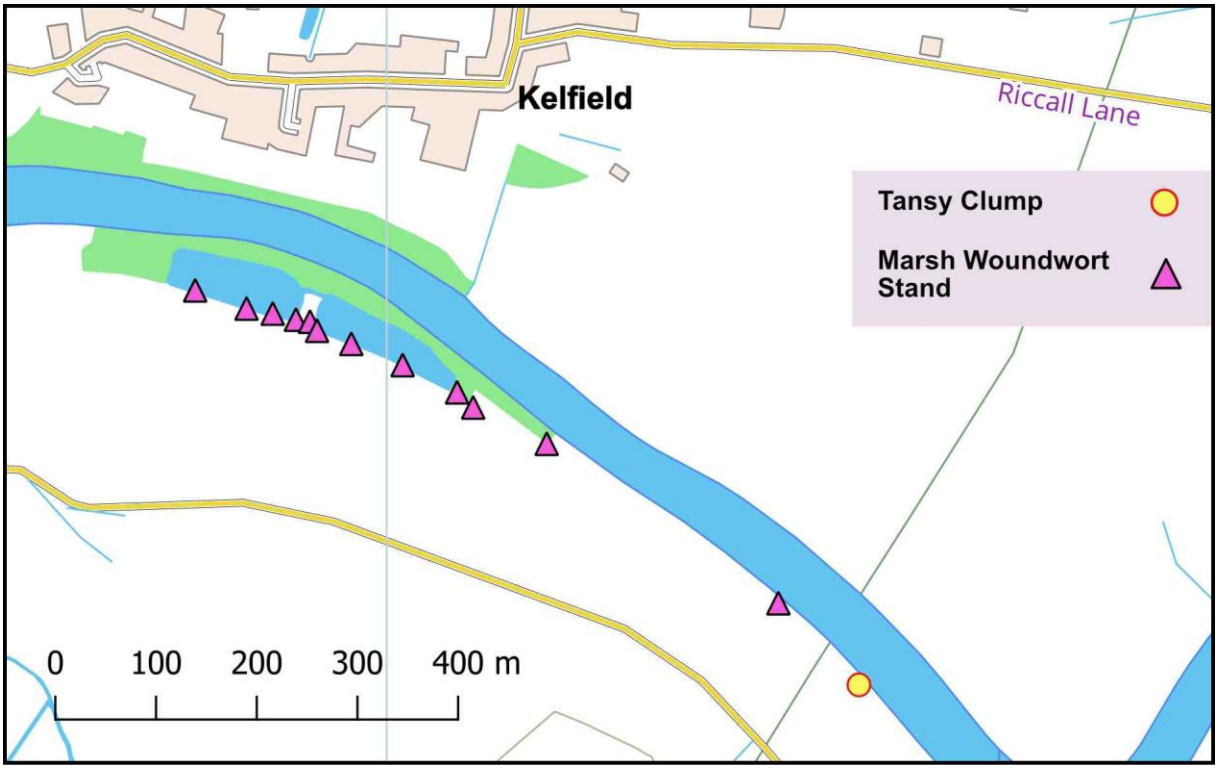
Management, threats and changes: -

Along transect 27 the land use is mixed, although the majority is unmanaged.

Tansy beetles have been recorded in previous years (**Table 31** in Chapter "**Numbers**"), but numbers were always very low.

One of the big issues is the mowing conducted along the river bank, which hinders any potential colonisation by Tansy plants. In addition, the Tansy clumps down by the river appeared very sparse in their growth during 2023, and part of this could be attributed to herbicide spraying done to control the amount of Himalayan Balsam present by the riverbank. 2024 saw more indiscriminate herbicide spraying affecting not only the Tansy clumps but also Willow (*Salix* spp.) trees and Himalayan Balsam. Considering 2025, it was noted that areas near and on the floodbank are mown, but the bank top and areas with Himalayan Balsam appeared to be unmanaged.

Figure 23. Stretch 9a - Marsh Woundwort stands and one Tansy clump, all without Tansy beetles south of Kelfield



Transect 20 East Bank surveyed by: -

James Wildash & Dave Moss (Same surveyors as in 2024).

Table 28. Transect 20 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	22	14	41	64%	17/8/2024	No management
East bank	13	0	0	0	1/9/2025	No management

Survey Assessment: -

Survey results for Transect 20 are shown above in **Table 26**.

Locations of Tansy plants along Transect 25 are shown in **Figure 22**.

Management, threats and changes: -

Management of the bank involves a mowing regime to allow for flood bank integrity checks and may be responsible for the changes in Tansy clump numbers. Another issue reported in 2023, which can influence potential colonisation by Tansy, was the large quantities of Himalayan Balsam present along the river bank that included a 60-metre stretch of Japanese Knotweed. Certainly in 2024 the Himalayan Balsam continued to be a problem and the Japanese Knotweed now occurs in two stands, one 20m in length and the other 100m in length. Rampant vegetative growth especially of Himalayan Balsam and Nettles prevailed in 2025.

It should be noted that Transect 20 is split into two sections, 20a and 20b **(Figure 22).** All records emanate from Transect 20a, as no Tansy plants and beetles were present in Transect 20b. In addition, North Yorkshire County Council have closed the footpath bridges on Transect 20b due to their state of disrepair, so future survey work may require an assessment for accessibility.

Stretch 10 – Riccall to Barlby

Transect 28 West Bank surveyed by: -

Nicola Ward and Steve Ward (New surveyors in 2025).

Table 29. Transect 28 West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
West bank	5	0	0	0	31/8/2024	Grazing sheep
West bank	31	0	0	0	5/9/2025	Grazing sheep

Survey Assessment: -

Survey results for Transect 28 are shown above in **Table 29**.

Locations of Tansy plants along Transect 28 are shown in **Figure 24**.

Regarding alternative food plants for Tansy beetles, 2025 has seen a marked increase. Thus 30 stands of Gipsywort, 15 stands of Marsh Woundwort, 2 Water Mint and one mixed stand of Water Mint, Marsh Woundwort and Gipsywort (**Figures 25, 26 & 27)** were observed and represents a significant increase from the 5 stands of Marsh Woundwort seen in 2024.

Figure 24. Stretch 10 – Riccall to Barlby

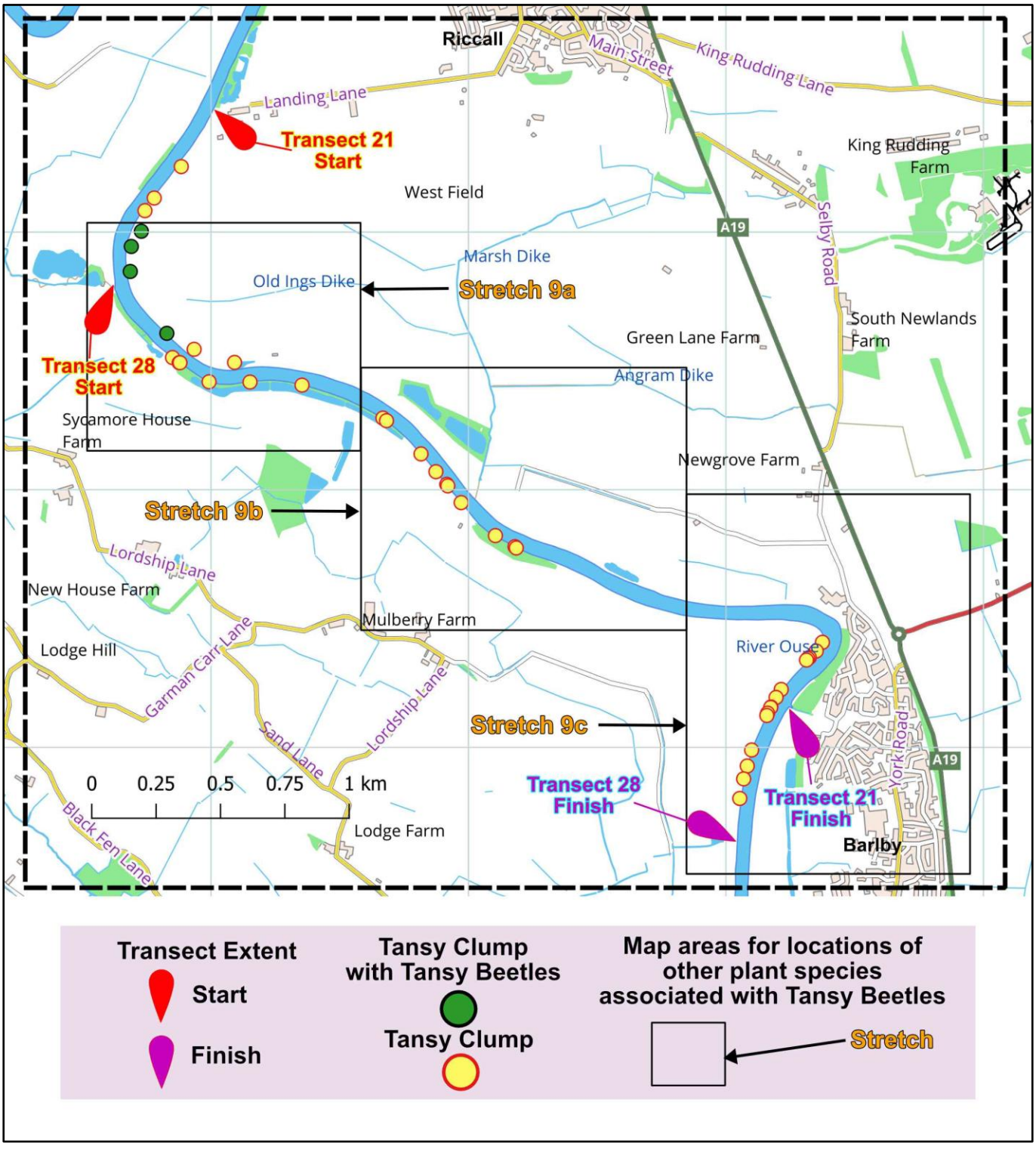
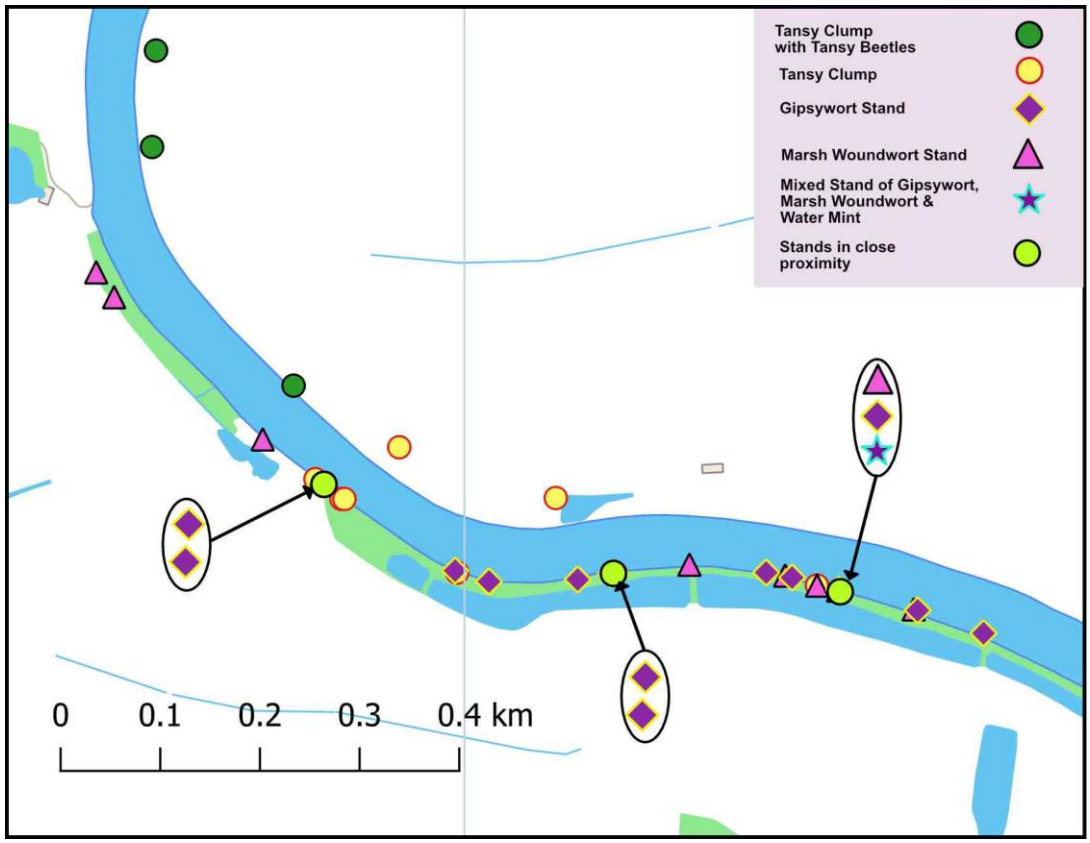


Figure 25. Marsh Woundwort, Gipsywort and one mixed stand of Water Mint, Marsh Woundwort and Gipsywort without Tansy Beetles and Tansy with and without Tansy Beetles east of Sycamore House Farm



Management, threats and changes: -

The extensive Willow (*Salix* spp.) tree growth supplemented also with Alder (*Alnus glutinosa*), mowing of vegetation in certain sections and continued sheep grazing along this transect may be responsible for the tenuous hold maintained by the Tansy plants and the infrequent colonisation by Tansy beetles. There was also evidence of thick patches of Creeping Thistle, Common Nettles, Rose Bay Willowherb and Himalayan balsam which may also interfere with Tansy plant colonisation. The above situation has not changed markedly in 2025 regarding the sheep grazing. However, the Himalayan Balsam threat seems to have abated with no real presence other than one noticeable 10m stand.

Figure 26. Marsh Woundwort, Gipsywort, Water Mint and Tansy without Tansy Beetles east of Sycamore House Farm

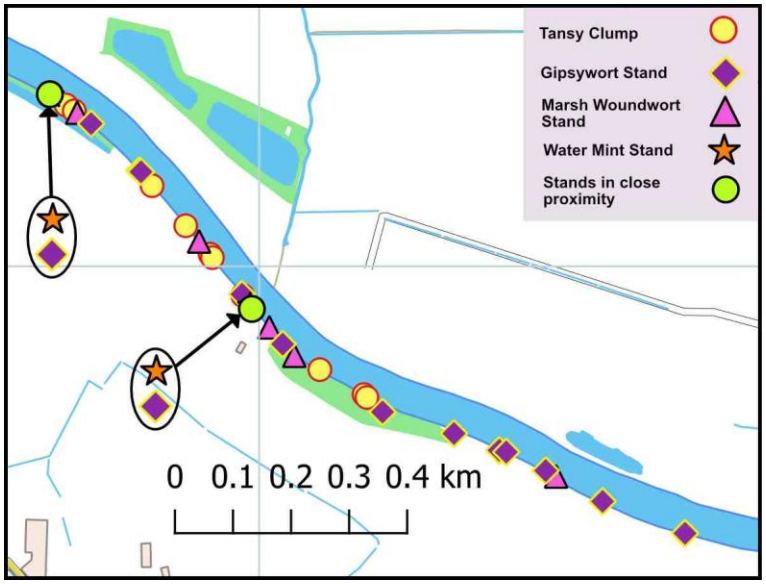
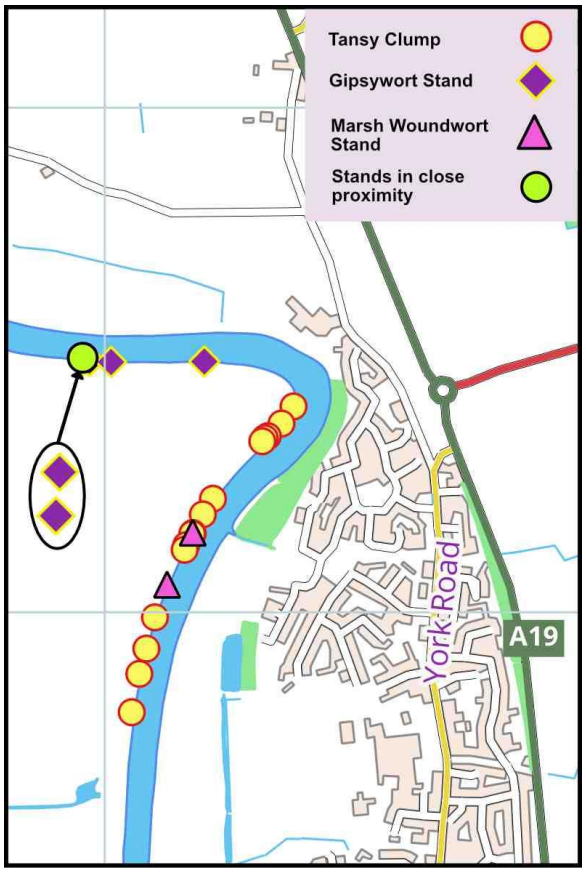


Figure 27. Marsh Woundwort, Gipsywort and Tansy without Tansy Beetles west of Barlby



Transect 21 East Bank surveyed by: -

Richard Wilson (Same surveyor as in 2024).

Table 30. Transect 21 East Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
East bank	10	6	16	60%	30/8/2024	Grazing Cattle
East bank	9	4	63	44%	1/9/2025	Grazing Cattle

Survey Assessment: -

Survey results for Transect 21 are shown above in **Table 30, 31**.

Locations of Tansy plants along Transect 21 are shown in **Figure 24**.

Table 31. Tansy Clump size and Tansy Beetle numbers in Enclosures along Transect 21

Tansy Clump Size	Number of Beetles	Enclosure
Absent	0	Enclosure 1
VL	0	Enclosure 2
VL	0	Enclosure 3
L	0	Enclosure 4
L	1	Enclosure 5
M	3	Enclosure 6
VL	5	Enclosure 7
Absent	0	Enclosure 8
VL	54	Enclosure 9
S	0	Enclosure 10
M	0	Enclosure 11

Management, threats and changes: -

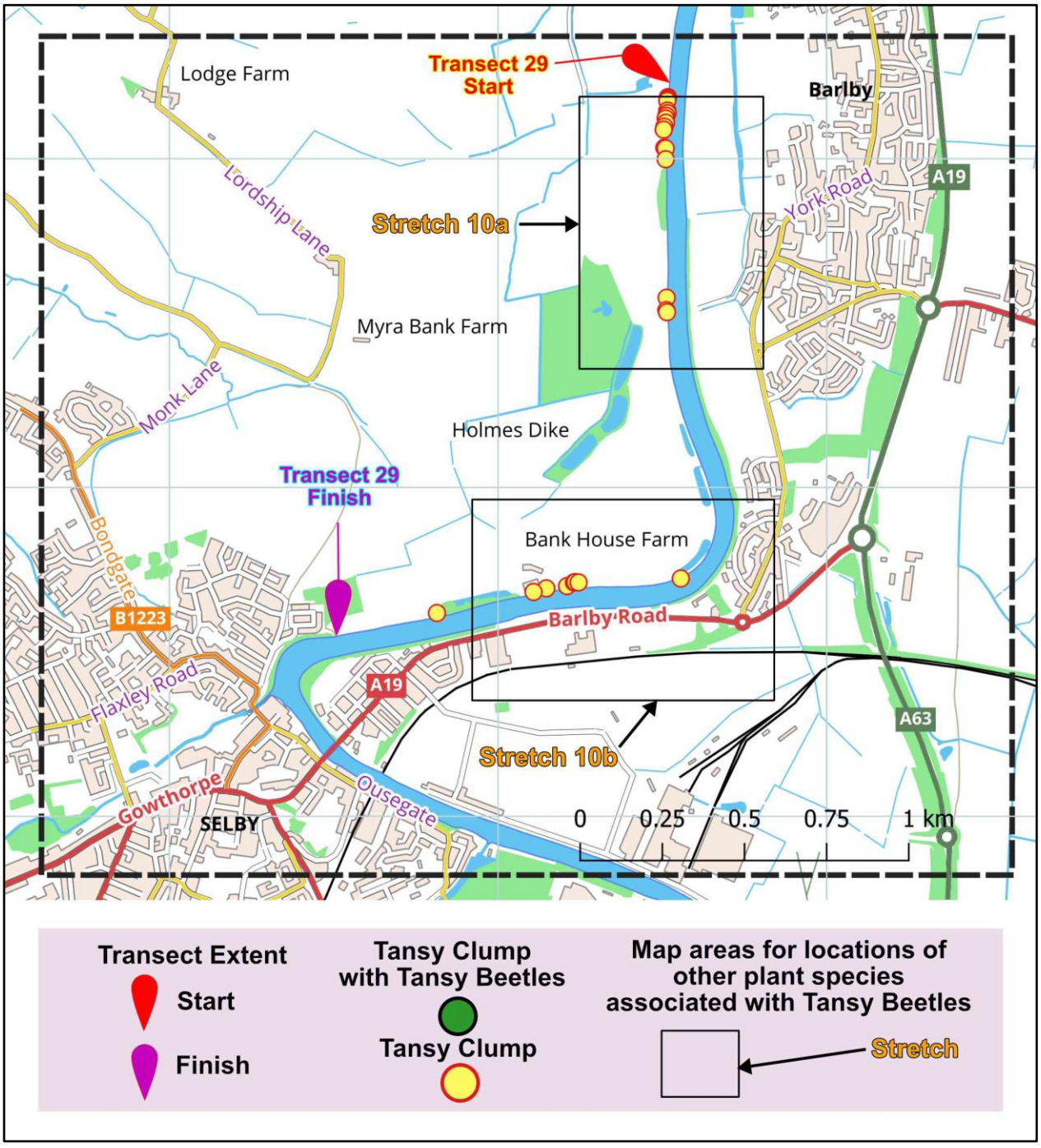
East Bank transect comprises cattle grazing and Tansy enclosures. The beetles are restricted to these enclosures and cannot survive beyond them because of the intense grazing. This was evidenced by Tansy plants being grazed close to the ground outside the enclosures. The enclosures vary in their success and will require some management in relation to their integrity and to improve the level of Tansy present.

Care must be taken over the interpretation of Tansy clump numbers, as over time growing clumps expand and amalgamate if they are in close proximity and this could explain the reduction in clump numbers in the enclosures over the years.

A number of these enclosures needed repair work to prevent access by grazing cattle. Certainly enclosures 4 & 8 were broken into by cattle in 2023. Tansy plants have already been lost in enclosures 9, 10 and 11 in previous years through cattle ingress. In 2024 efforts were made to repair the damaged enclosures enabling the Tansy to re-colonise. Considering 2025, the situation is more promising with Tansy plants in 9 enclosures, absent in Enclosure 1 and none in Enclosure 8 as this was broken with cattle able to access.

Stretch 11 – Barlby to Selby

Figure 26. Stretch 11 – Barlby to Selby



Transect 29 West Bank surveyed by: -

Nicola Ward (New surveyor in 2025).

Table 32. Transect 29 West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
West bank	14	1	2	7%	17/8/2024	Mown/Grazed by sheep & cattle
West bank	25	0	0	0	8/9/2025	Mown/Grazed by sheep & cattle

Survey Assessment: -

Survey results for Transect 29 are shown above in **Table 32**.

Locations of Tansy plants along Transect 28 are shown in **Figure 26**.

Regarding alternative food plants there has been a noticeable increase from one stand of Marsh Woundwort in 2024 to 5 stands of Marsh Woundwort and 4 stands of Gipsywort in 2025 (**Figure 27, 28**).

Management, threats and changes: -

The overall situation is not good as in previous years the Tansy plants were often mown, and sometimes in poor condition. The situation is further exacerbated by stands of Willow (*Salix* spp.) trees dominating the bankside along with patches of Common Nettle, Creeping Thistle and Tufted Vetch (*Vicia cracca*). Despite this, Himalayan Balsam appears not to be a threat even allowing for one 100m patch of the species. Furthermore, natural Tansy Beetle colonisation is not helped by the loss of beetles slightly north of this area (on transect 28) in 2019, so there will be no natural dispersal to take advantage of these few remaining Tansy plants at the northern and southern end of Transect 29. In 2025, upstream of Bank House Farm, sheep grazing was noted. Downstream of the farm and going west towards Selby, the management is still cattle grazing, which is at a level that prevents sustainable Tansy growth and retention.

Figure 27. Gipsywort, Marsh Woundwort and Tansy stands without Tansy Beetles west of Barlby

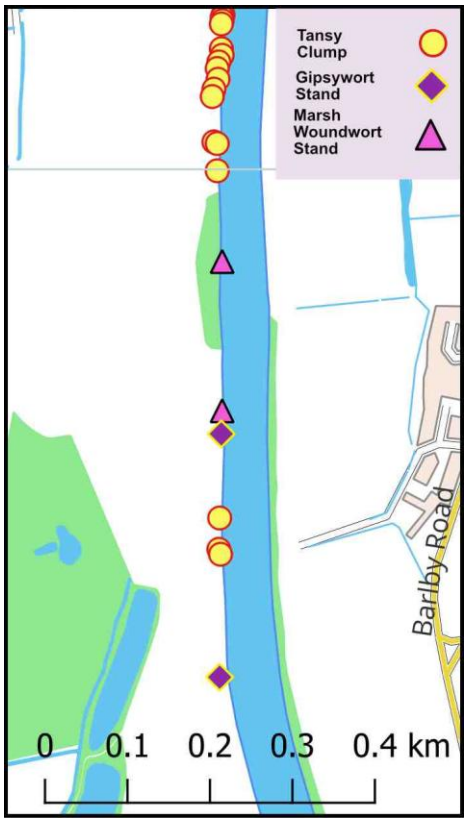
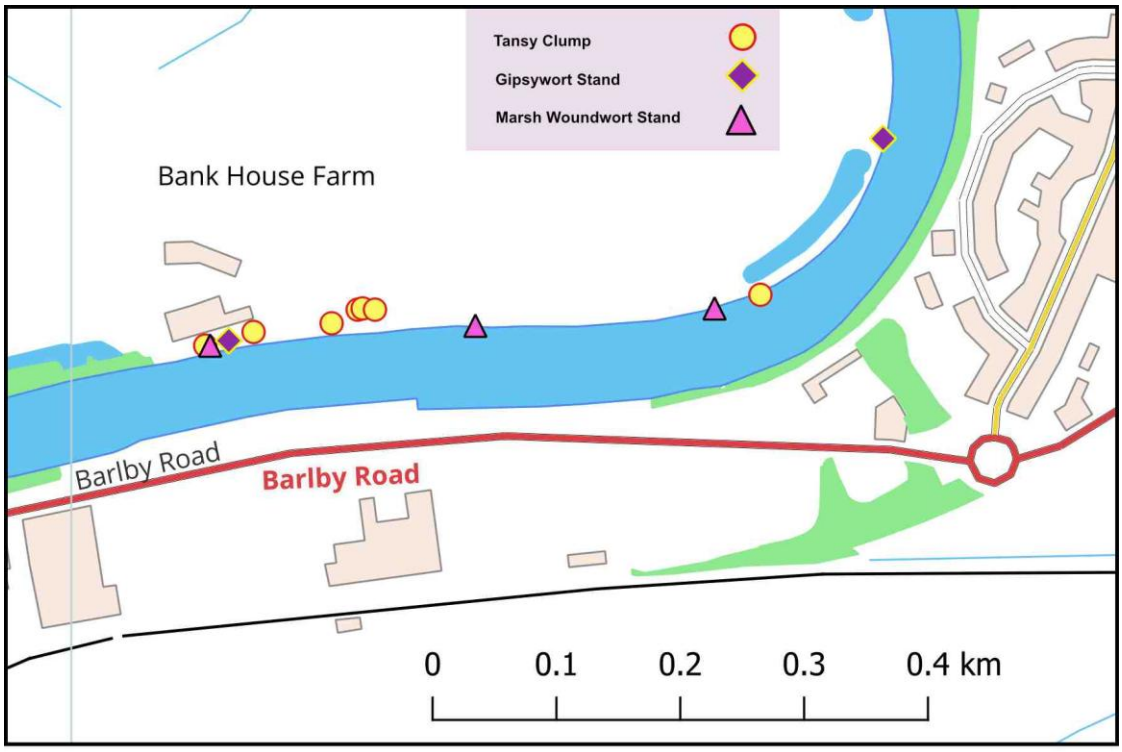


Figure 28. Gipsywort, Marsh Woundwort and Tansy stands without Tansy Beetles south and east of Bank House Farm



NUMBERS

Table 31 below compares numbers of beetles counted on the transects along the Ouse riverbank over the last 17 years. The first survey year, 2009, is not included because coverage was far from complete. In addition, it must always be borne in mind that any changes in surveyor for a particular transect can lead to subtle changes in plant and beetle counts, until the person becomes familiar with the idiosyncrasies of their patch. Past statistical assessments of surveyor changes have not yielded any significant changes in counts (Tansy Beetle Survey 2020), so evident alterations in beetle numbers are more likely to reflect physical e.g., flooding, prolonged dry conditions, stock grazing and/or possible biological factors e.g., predation, disease. Another factor now being considered is the suitability of the survey window (see **Survey Window Suitability, page 55**).

Taking all surveyed stretches of the river Ouse into account (excluding the Selby Canal and river Foss) a total of 3723 beetles was counted/estimated in 2025 compared with 12292 in 2024, a 70% decrease. Applying the doubling rule for beetles counted on Tansy plants, it is estimated that the total late-summer population on the Ouse in 2025 comprised around 7370 individuals. However, this figure does not include:

- 13 beetles feeding on Marsh Woundwort stands
- 3 beetles feeding on a Gipsywort stand
- 14 beetles feeding on mixed Tansy and Marsh Woundwort stands
- 4 beetles feeding on a mixed Marsh Woundwort and Water Mint stand
- 1 beetle feeding on a mixed Marsh Woundwort and Gipsywort stand
- 3 beetles on a mixed Marsh Woundwort, Water Mint and Gipsywort stand

Table 31. Beetle numbers counted on various transects over 14 years

Transect Number	Bank	Transect	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	East	Linton Lock to Nun Monkton	505	939	9	20	184	626	2481	1916	1628	1173	20	106	268	2637	132	115
													*	*	*	*	*	*
2	East	Nidd confluence to Nether Poppleton	32	272	2	33	226	2317	1602	273	230	388	157	394	197	1937	135	16
				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3 & 4	East	Nether Poppleton to Clifton Bridge	76	113	1	48	137	215	84	116	82	37	340	1413	130	116	38	32
5	East	Rawcliffe Meadows	N/S	N/S	182	208	429	2248	352	377	182	N/S	75	148	84	15	142	60
															*	*	**	***
6a	West	Clifton Bridge to Scarborough Bridge	0	N/S	0	0	0	0	0	0	0	0	0	0	0	0	0	1
					*	*	**	**	**	**	**	***	****	*****	*****	******	******	******
6b	East	Clifton Bridge to Scarborough Bridge	N/S	21	0	0	1	137	809	415	845	84	65	431	96	146	125	366
					*	*	**	**	**	**	**	***	****	*****	*****	******	******	******
7,8,9	West	Linton Lock to Nidd Confluence	245	433	0	0	19	1311	3129	1632	3629	4924	221	1053	3216	7524	936	857
													*	*	**	**	***	***
10	West	Nidd confluence to Nether Poppleton	0	0	21	0	309	17	335	77	27	54	1001	362	155	936	213	153
				*	*	*	*	*	**	*	*	*	*	**	***	***	***	***
11&12	West	Nether Poppleton to Clifton Bridge	109	171	32	260	33	176	69	35	115	68	471	118	0	43	30	12
13	East	York to Sheepgate	560	53	14	7	107	343	263	188	18	48	48	155	32	202	19	35
					*	*	*	*	*	*	*	*	*	*	*	**	**	**
14	East	Sheepgate to Ring Road	71	12	4	4	85	102	467	207	70	112	564	953	198	3576	3251	469
					*	*	*	*	**	**	**	***	**	***	***	***	***	****

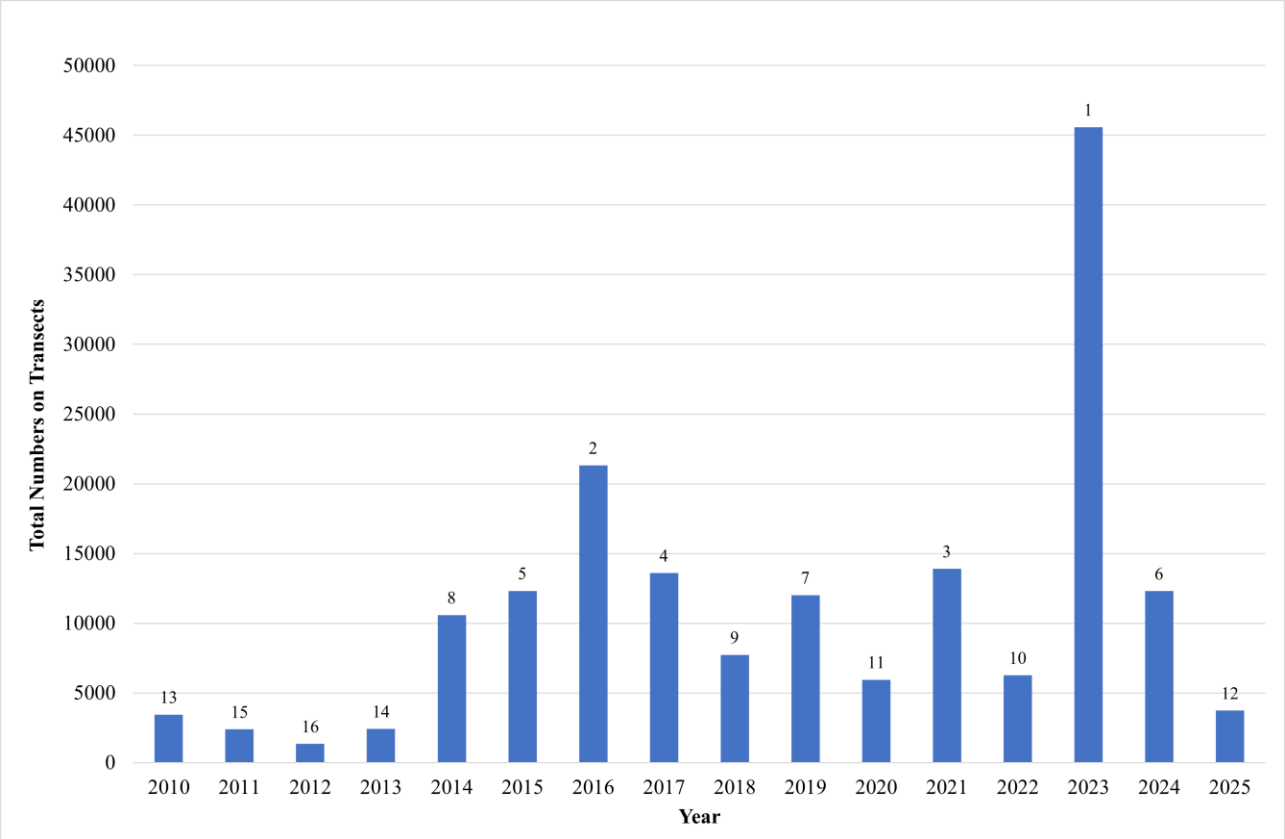
Transect Number	Bank	Transect	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
15	East	Water Fulford	47	27	0	1	219	347	620	27	0	143	130	6	69	740	303	2
					*	*	*	*	*	*	*	*	**	**	**	**	**	**
16a	East	York Marina	N/S	0	0	0	3	72	N/S	N/S	0	2	0	1	14	67	16	8
					*	*	**	**			***	****	*****	*****	*****	*****	*****	*****
16b	East	Naburn Hall to Naburn Lock	N/S	N/S	N/S	N/S	0	N/S	N/S	N/S	N/S	72	6	4616	106	1139	85	3
												*	**	**	***	***	***	***
17	East	Naburn Lock	N/S	0	0	0	0	N/S	0	N/S	0	0	0	0	0	0	3	4
					*	*	*		*		*	*	*	*	*	*	*	*
18	East	Naburn Lock to Stillingfleet	N/S	33	7	6	54	6	3	152	21	5	18	19	8	95	62	14
														*	*	*	*	*
19	East	Stillingfleet to Cawood Bridge	0	0	0	1	67	99	26	11	8	2	1	35	0	71	115	1
				*	*	*	*	*	*	*	*	**	*	*	*	**	**	**
20	East	Cawood Bridge to Riccall	28	20	2	22	27	15	15	3	35	3	N/S	869	0	16	41	0
								*	*	*	*	*		**	*	*	*	*
21	East	Riccall to Barlby	3	0	1	30	19	760	32	239	251	477	242	97	107	271	16	63
				*	**	**	**	**	**	***	***	***	***	****	****	****	****	****
22	West	Skeldergate Bridge to north of Bishopthorpe	62	9	N/S	0	0	0	0	0	0	16	82	1039	28	463	482	82
													*	**	**	**	***	***
23	West	Bishopthorpe to Acaster Malbis	N/S	167	274	537	542	1411	1033	216	112	152	390	878	136	630	321	249
24	West	Acaster Malbis to Acaster Selby	1554	79	718	1104	7899	1523	9429	7448	298	4012	2108	1197	1395	24943	5829	1143
					*	*	*	*	*	*	*	*	*	**	*	*	*	*
25	West	Acaster Selby to the river Wharfe	68	30	0	0	0	0	0	16	120	195	2	0	14	1	3	0
													*	*	*	*	*	*

Transect Number	Bank	Transect	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
26	West	Cawood to Wharfe confluence	0	0	0	0	0	0	0	0	0	0	N/S	0	0	0	0	0
					*	*	*	*	*	*	*	*		*	*	*	*	*
27	West	Cawood Church to Wistow Clough	12	1	1	0	37	189	444	214	38	3	0	2	3	0	0	0
						*	**	**	**	**	**	**	**	**	**	**	**	***
28	West	Wistow Clough to Great Clough	68	1	66	126	186	405	123	24	15	45	0	0	0	0	0	0
													*	*	*	*	*	**
29	West	Great Clough to Selby	N/S	1	1	0	0	0	1	0	0	0	0	0	0	0	2	0
					*	*	*	*	*	*	*	*	**	**	**	*	*	**
		Total	3440	2382	1335	2407	10583	12319	21317	13586	7724	12015	5941	13892	6256	45569	12299	3723

Key for **Table 31**: -

- N/S – Not surveyed.
- Numbers in red represent initial counts after reintroductions.
- Asterisks refer to surveyor changes over time. Each additional asterisk refers to a new surveyor change whilst the removal of an asterisk refers to the return of the previous surveyor.
- Split cells are used to separate Tansy beetle numbers (top split cell) from changes in surveyors (bottom split cell)

Figure 29. Plot of total beetle counts along stretches of bank per year from 2010 to 2025 (data from **Table 31**). Numbers over the bars indicate the rank order of annual abundance



2025 has seen a 70% drop in Tansy Beetle numbers when compared with 2024. When considering the 16 years of data, the 2025 figure represents the fifth lowest number of beetles counted since recording started along the river Ouse in 2010 (**Figure 29**).

SURVEY WINDOW SUTABILITY

Concerns have been raised over the suitability of the survey window which runs from the 7th August to 7th September. An examination of June Whittaker's Phenology studies on two Tansy clumps shows Tansy Beetle numbers, in their second phase above ground, reducing from a peak after the 22nd /29th July in 2024 (**Figure 30**) and the 14th /28th July in 2025 (**Figure 31**).

Looking at the survey dates chosen for the various transects in 2024 and 2025 (**Table 32**) all of them have been pursued well after the peak date in the phenology studies for maximum number of beetles recorded. In addition, **Table 32** also shows the wide range of dates used within the survey window for surveying in each year. Survey dates have been grouped and colour coded to assist in showing that survey dates for particular transects often varied between years.

Figure 30. June Whittaker's Phenology Study looking at beetle numbers over the year on two Tansy clumps during 2024

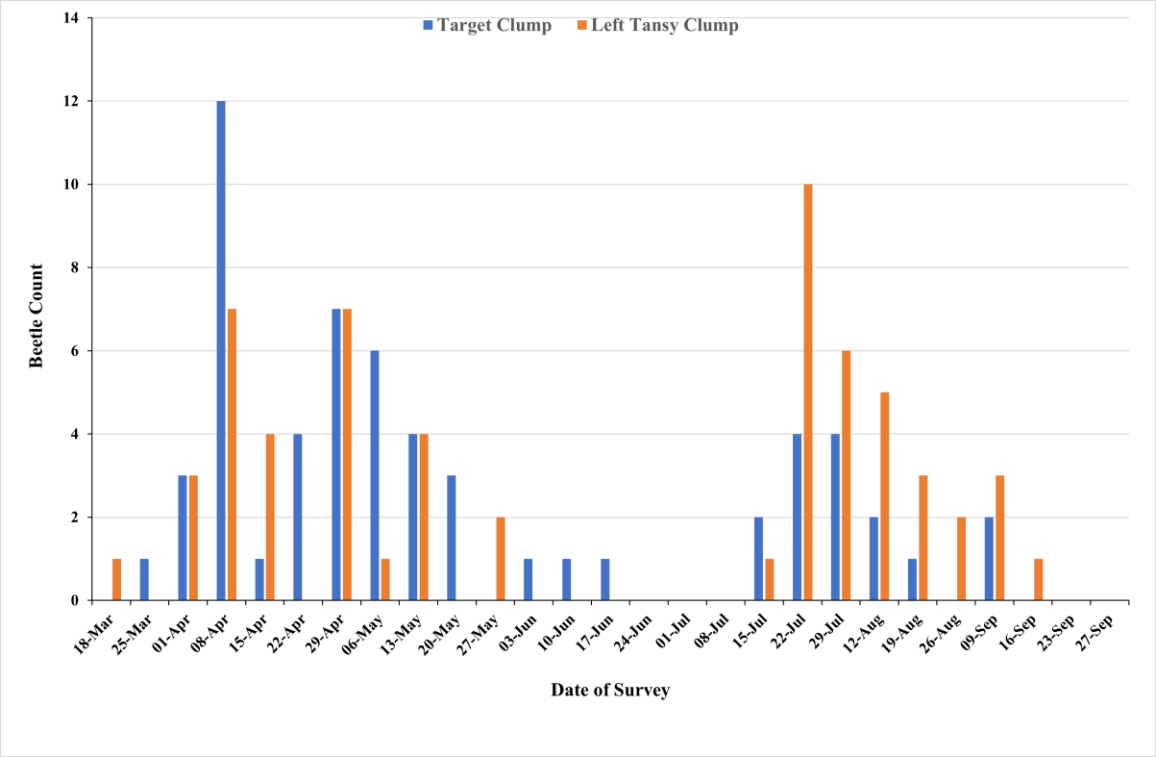


Figure 31. June Whittaker's Phenology Study looking at beetle numbers over the year on two Tansy clumps during 2025

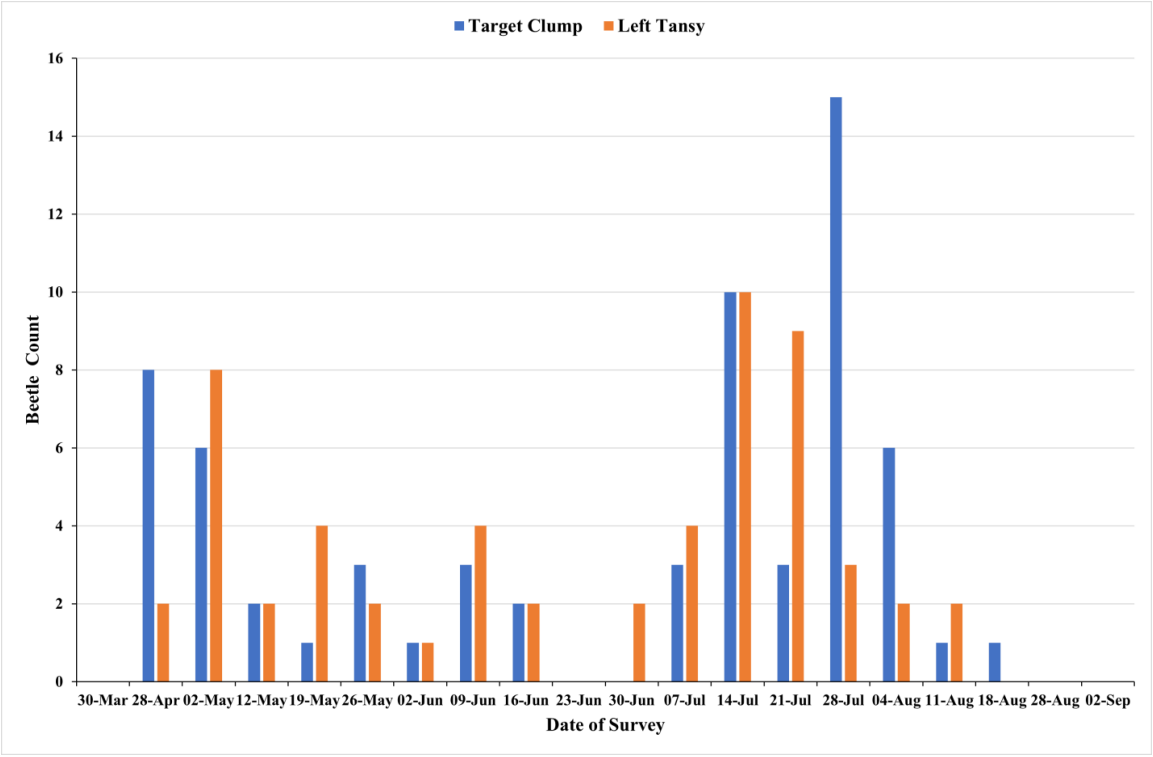


Table 32. Survey Dates and Beetle Counts for the various Transects in 2024 and 2025

		2024				2025		
Transect		Date of Survey		Beetle Number		Date of Survey		Beetle Number
1		03-Sep		132		31-Aug		116
2		25-Aug		135		31-Aug		16
3/4		31-Aug		38		17-Aug		32
5		09-Aug		142		20-Aug		60
6		04-Sep		125		20-Aug		367
7		21-Aug		485		12-Aug		716
8/9		05-Sep		451		03-Sep		141
10		11-Aug		213		09-Aug		153
11/12		26-Aug		30		11-Aug		12
13a		11-Aug		5		28-Aug		3
13b		30-Aug		7		11-Aug		35
14		14-Aug		3251		14-Aug & 31-Aug		469
15		18 & 21-Aug		303		24-Aug		2
16a		28-Aug		16		15-Aug		20
16b		28-Aug		85		30-Aug		3
17		25-Aug		3		14-Aug		4
18		07-Aug		62		14-Aug		34
19		07-Aug		115		14-Aug		1
20		17-Aug		41		01-Sep		0
21		30-Aug		16		01-Sep		63
22		18-Aug		482		23-Aug		85
23		19-Aug		321		11-Aug		249
24		7 to 13-Aug		5829		10 to 12-Aug		1143
25		06-Sep		3		02-Sep		0
26		17-Aug		0		01-Sep		0
27		20-Aug		0		13-Aug		0
28		31-Aug		0		05-Sep		0
29		17-Aug		2		08-Sep		0
			Total	12292			Total	3723

KEY:

Survey dates from 7/8/ to 15/8

Survey dates from 17/8 to 23/8

Survey dates from 24/8 to 31/8

Survey dates from 1/9 to 8/9

Table 33. Comparing survey dates and beetle numbers from the 2024 and 2025 results shown in **Table 32**

Survey Date in 2025	**Transect**	**Comparing Beetle Numbers in 2024 and 2025**
Earlier than in 2024	1, 3/4, 8/9, 10, 11/12, 23, 25	Down in 2025
Later than in 2024	2, 5, 13a, 15, 16b, 18, 19, 20, 22, 29	Down in 2025
Earlier than in 2024	6, 7, 13b, 16a, 17	Up in 2025
Same dates as in 2024	24, 14*	Down in 2025
Later than in 2024	21	Up in 2025
Later than in 2024	26, 28	No beetles in 2024 & 2025
Earlier than in 2024	27	No beetles in 2024 & 2025

* The survey along Transect 14 was done on two dates. One date was the same in both years and the other was much later.

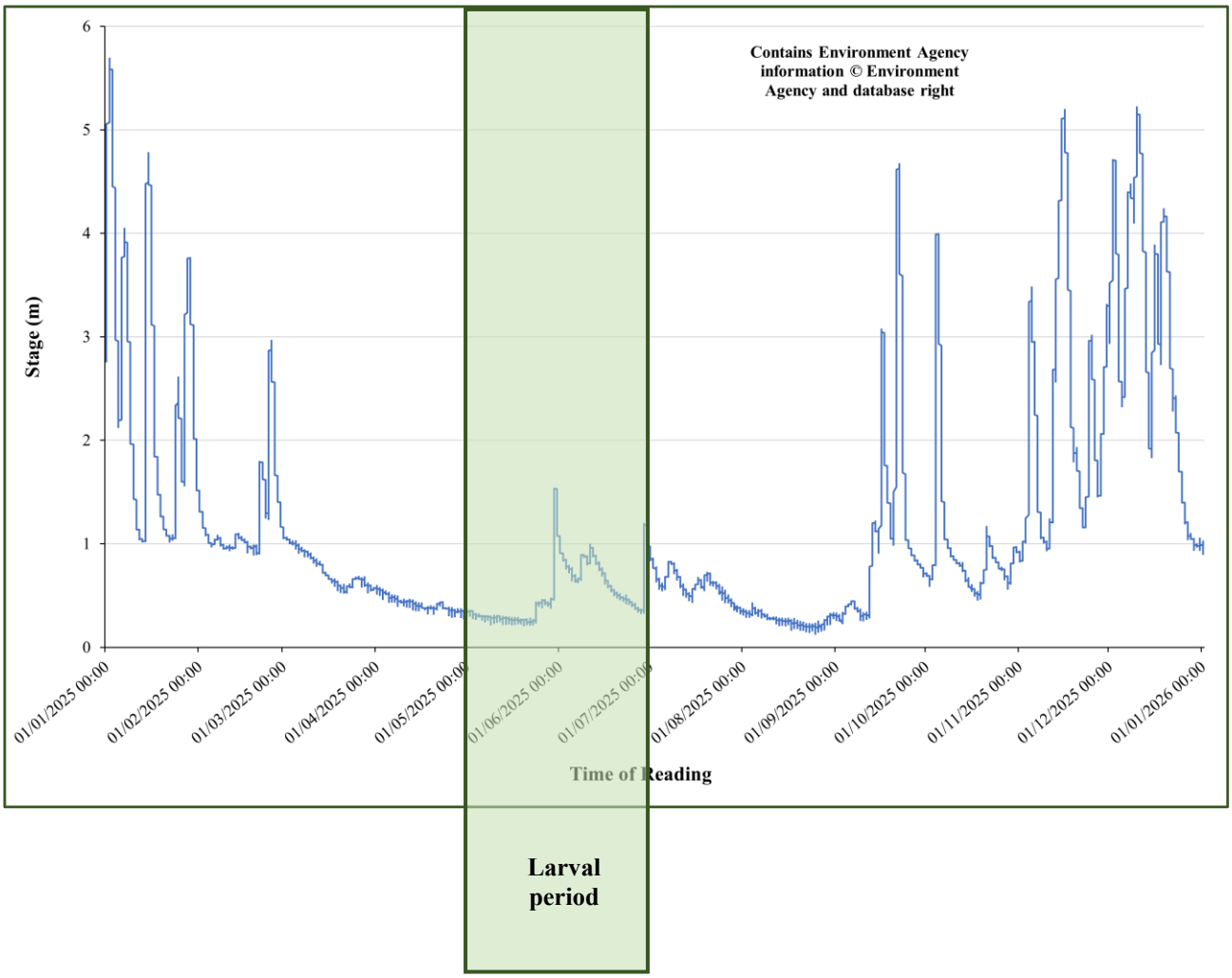
It is difficult to make any clear statements on what is happening in 2024 and 2025 when examining **Table 33** and the situation is not helped by the fact that some transects generally record low numbers of beetles each year (**Table 31**). However, the fact still remains that beetle numbers were markedly down in 2025 when compared to 2024 and that the phenology studies are indicating that the existing survey window occurs at a time when Tansy beetles are rapidly going into hibernation. In the light of this and following a TBAG meeting on the 12th March 2026, a decision was taken to move the survey window back to start on the 22nd July when Tansy Beetle numbers are peaking in their second phase above ground and then finish on the 22nd August. Hopefully this will provide sufficient flexibility for surveyors with busy work schedules besides providing a better quantitative indication of beetle numbers for the year.

FLOODING

Within the Tansy beetle survey area from Newton-on-Ouse to Selby along the river Ouse there are three key confluences with the river Nidd, the river Foss and the river Wharfe. Below each confluence there is a gauging station that monitors the level of the river Ouse every 15 minutes: -

- Moor Monkton gauging station below the river Nidd (**Figure 32**)
- Foss gauging station below the river Foss (**Figure 33**)
- Cawood gauging station below the Wharfe (**Figure 34**)

Figure 32. River levels at Moor Monkton gauging station (as metres above gauge board zero) between 1st January 2025 and 1st January 2026. The approximate larval period is superimposed.

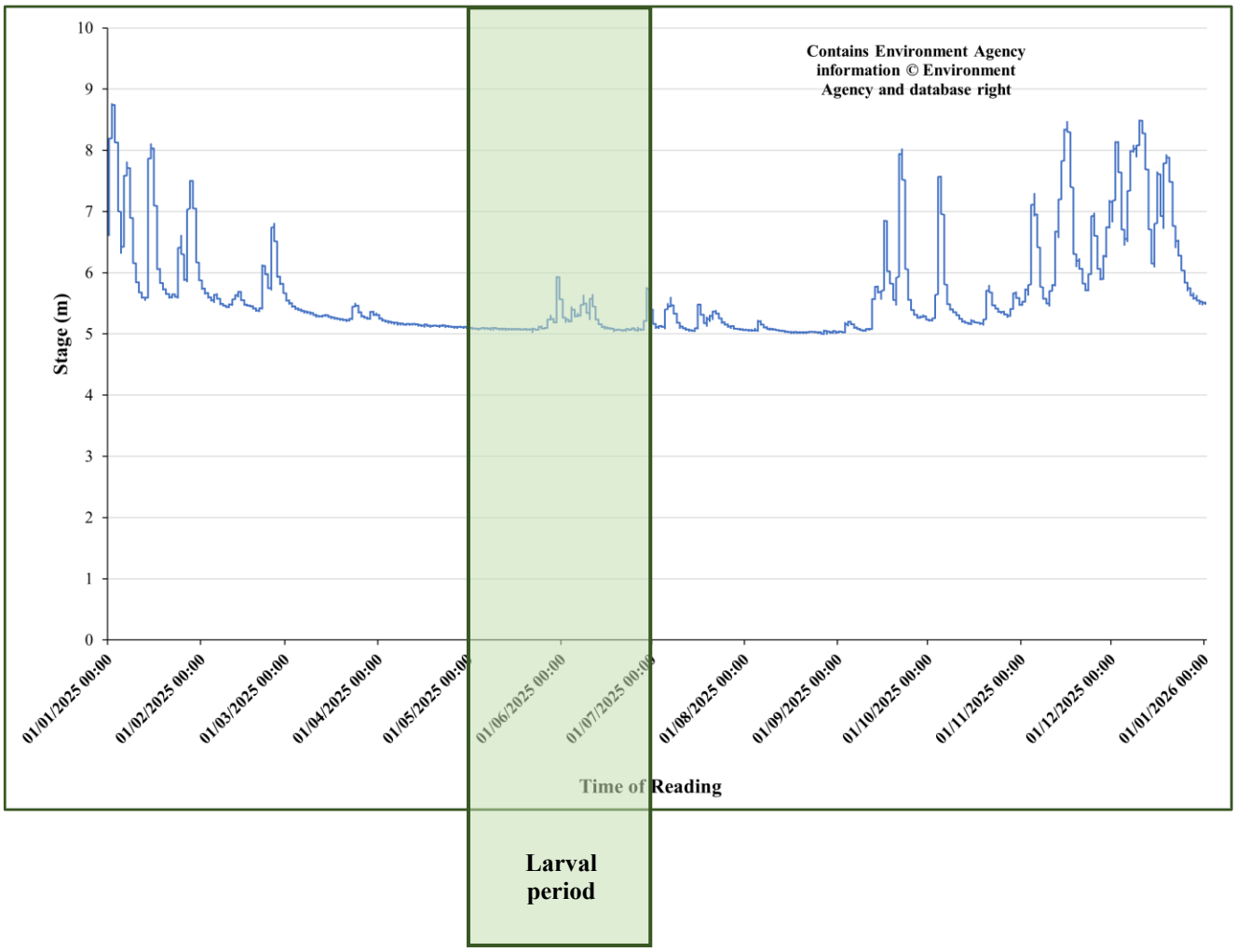


The river levels at each of the gauging stations have been graphed along with the approximate period when beetle larvae are on the food plant. Although larvae seem to be the most vulnerable stage of the beetle's life cycle (they fall off plants and drown), egg batches do not survive inundation for more than a few days (Oxford & Oxford, 2022).

Looking at the Moor Monkton stage readings (**Figure 28**), no water levels exceeding 4m on the gauge board in early April which could have affected adult beetles emerging from the soil. Likewise, through spring and summer water levels only reached 1.5m on the gauge board. Thus, it is unlikely water levels would compromise even eggs and larvae on Tansy plants growing lower down the river banks to the north of York. The first high water levels in the autumn started from mid-September, by which time the majority of beetles had gone underground to hibernate as indicated by June Whittaker's Phenology study (**Figure 31**).

A similar picture regarding water levels on the river Ouse also applies to the Foss stage in York (**Figure 33**).

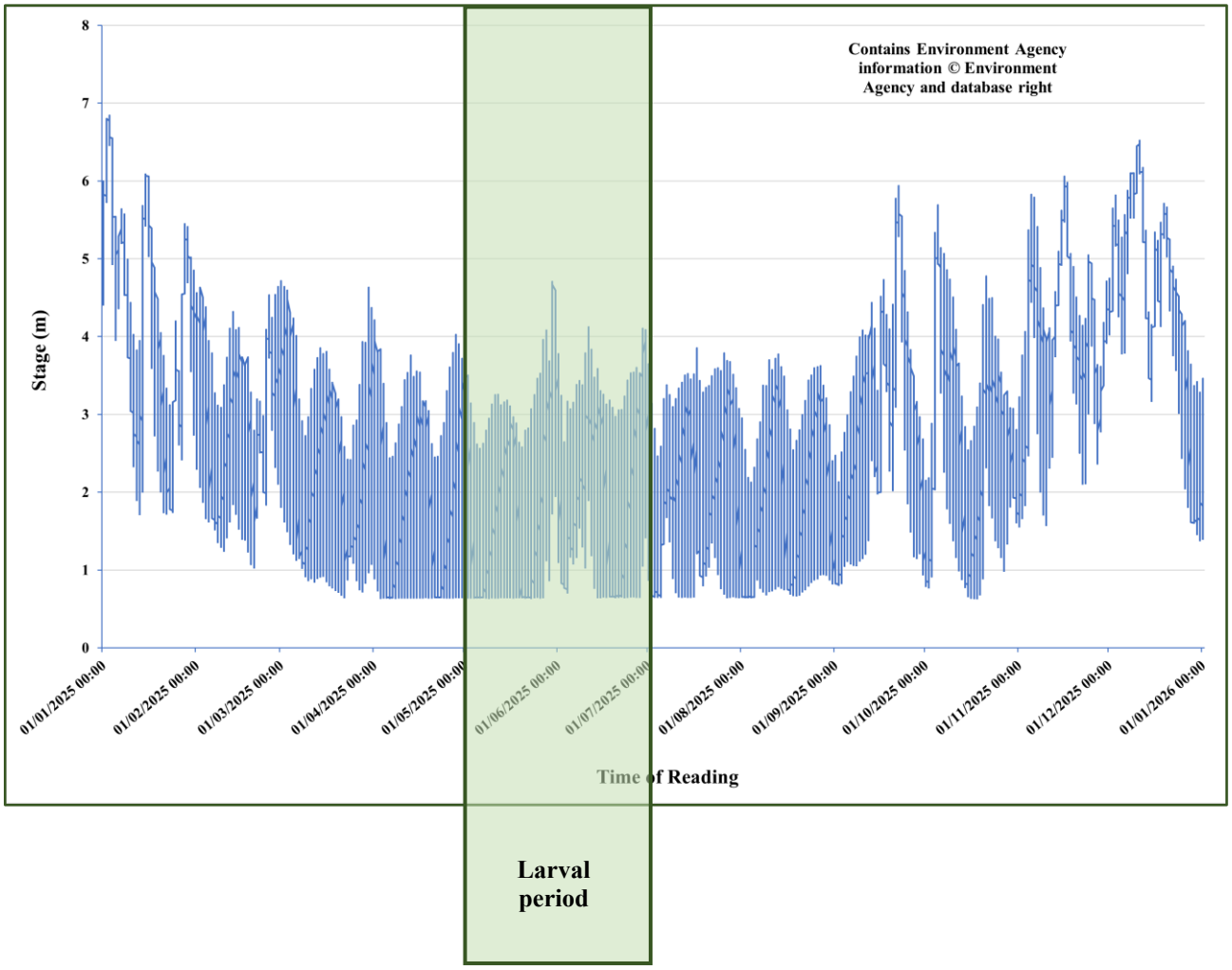
Figure 33. River levels at Foss gauging station (as metres above gauge board zero) between 1st January 2025 and 31st December 2026. The approximate larval period is superimposed.



When considering the gauge board readings at Cawood Gauging Station (**Figure 30**), the graph clearly shows the regular rise and fall of the water levels associated with the tides that affect the river Ouse at this location. Allowing for the tidal effect and assuming there is no flooding or drought conditions, the river level tends to fluctuate around the 2.5m mark on the gauge board at maximum

river tidal level. The trend on the graph follows largely the same pattern as seen at the Moor Monkton and Foss Gauging Stations.

Figure 34. River levels at Cawood gauging station (as metres above gauge board zero) between 1st January 2025 and 1st January 2026. The approximate larval period is superimposed.



CONCLUSIONS

The northern end of the river Ouse has seen a contraction in the Tansy beetle range (**Figure 35**). Beetles on the east bank were seen west of Newton-on-Ouse in 2024, but now their presence in 2025 begins 1 kilometre downstream, south of the village. Likewise on the west bank, Tansy beetles were found just east of Linton Locks in 2024 but have now contracted back 600m to just north of Newton-on-Ouse.

At the southern end of the Tansy beetle range along the river Ouse there was no change on the east bank between 2024 and 2025 (**Figure 35**). This is not surprising as the beetles were only found on Tansy plants within stock proof enclosures. Considering the west bank at the southern end of its range

the situation has deteriorated markedly. The Tansy beetles were absent from the riverbank by Bank House Farm just north of Selby and also just north of the river Ouse and river Wharfe confluence and now their range in 2025 only goes as far as Hales-Hill Farm north of Acaster Selby, a contraction of approximately 17.5 kilometres. However, it must be stressed that the two beetles reported by Bank House Farm in 2024 could have been washed down from further upstream during flooding events in the summer (Louis, 2024), so the absence of beetles in 2025 would not be unusual as the location rarely sees any beetles (**Table 31**). Likewise, Tansy beetle presence north of the river Ouse and river Wharfe confluence decreased suddenly in 2020 due to possible changes in land management which in later years was compounded by erosion control measures along the riverbank (Louis, 2024). Thus, the disappearance of beetles along this stretch was not unexpected.

When comparing the 2024 results with those from 2025 with regard to the number of Tansy beetles on the various transects, it is very evident that 2025 has seen a marked drop in the number of Tansy beetles and this was reflected over the majority of transects. Only a few transects revealed small increases such as transect 5, 13, 17, 21 with two exceptions being transect 6 going from 125 beetles in 2024 to 367 in 2025 and transect 7 which went from 479 beetles in 2024 to 716 beetles in 2025

When considering the number of Tansy plants seen in 2024 and 2025 care is needed in interpreting the results as: -

- Tansy clumps in close proximity often merge together reducing the number of clumps counted
- Land management practices can change with stock grazing Tansy clumps and hay making removing plants
- Competition between plant species can prevent Tansy plant colonisation and plant growth can be reduced through shading

Consideration of Tansy plant numbers along the various transects in 2024 and 2025 (**Table 34**) suggests an overall increase in clump numbers by over 200. It must be stressed that approximately 30 of these additional tansy clumps were from South Fields and a drainage ditch adjacent to Hales Hill Farm which were included in transect 24 for the first time in 2025. Likewise Transect 1 and 6 also showed marked increases in Tansy plant numbers by 79 and 63 respectively.

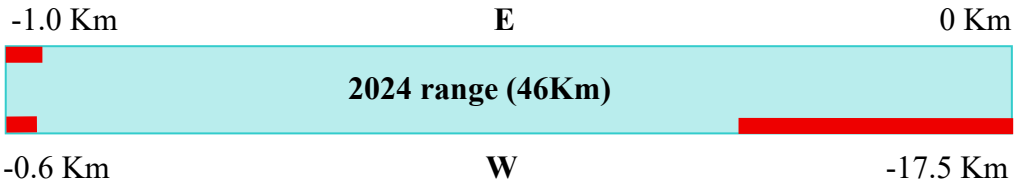
The river level data for 2025 from the Environment Agency suggest that flooding was not an issue for Tansy beetles, their larvae and eggs, during the Spring, Summer and early Autumn.

Concerns have been raised about the suitability of the Survey window which runs from the 7th August to the 7th September. This has come about as a result of June Whittaker's phenology study in 2024 and 2025 which shows Tansy beetle numbers decreasing rapidly towards the end of July. This information is further compounded by the fact that around 50% of all transects were assessed after mid-August and overall, Tansy beetles in 2025 were 70% down from their 2024 level.

Table 34. Tansy plant and Tansy beetle numbers along the river Ouse in 2024 and 2025

Transect	Total beetles on Tansy plants 2024	Total beetles on Tansy plants 2025	Total Tansy plants 2024	Total Tansy Plants 2025
1	129	115	83	182
2	135	16	116	95
3&4 Combined	38	32	59	64
5	32	60	29	26
6	125	367	73	136
7	479	716	218	177
8&9 Combined	449	141	43	61
10	194	153	46	65
11&12 Combined	30	12	102	104
13a	5	3	161	150
13b	7	32	52	56
14	3241	469	86	89
15	301	2	150	192
16a	9	8	38	27
16b	85	3	43	40
17	3	4	52	47
18	44	14	16	15
19	115	1	64	26
20	41	0	22	13
21	16	63	10	9
22	482	82	89	92
23	287	249	148	186
24	5788	1143	289	341
25	3	0	17	10
26	0	0	15	13
27	0	0	20	16
28	0	0	5	31
29	2	0	14	25
	12363	3685	2060	2288

Figure 35. Depiction of approximate range changes (not to scale) since 2024.
Blue = expansion, Red = contraction.



The river distance between the current maximum range edges in 2025 is approximately 45km (28miles), down from the 2024 range.

MANAGEMENT OF FOODPLANT RESOURCES FOR THE TANSY BEETLE

The data from the annual Tansy beetle surveys are used every year to provide reports and advice to landowners and managers along the river Ouse, to help them improve the habitat for the beetles and their preferred foodplants. This work is undertaken by the Species Recovery Trust working with partners such as St Nicks, the Environment Agency, National Trust and City of York Council. The report for 2025 outlines the importance of mowing undisturbed sites to support Tansy clumps.

The Clifton Ings and Kelfield Ings sites are managed by the Environment Agency (EA) and the extent and vigour of Tansy clumps have fluctuated significantly in response to changes in site mowing regimes. At both sites there was a risk that mowing at the wrong time of year, which was necessary to manage the flood banks, would affect the Tansy beetle numbers. In response the EA altered the mowing regimes to reduce this risk by mowing around the clumps. This new mowing regime was initially beneficial with clumps thriving into the following year of implementation. Unfortunately, the mowing regimes were not on an annual basis and in subsequent years the Tansy clumps were outcompeted by more aggressive vegetation, such as coarse grasses and competitive forbs, leading to their eventual disappearance. The marked reduction in Tansy plants and Tansy beetles can be seen at Clifton Ings when comparing results from year 2022 with year 2025 (**Figure 36)** and likewise at Kelfield Ings when year 2024 is juxtaposed with year 2025 (**Figure 37).**

Figure 36. Beetle Occupancy and Tansy Clump Size at Clifton Ings in 2022 and 2025

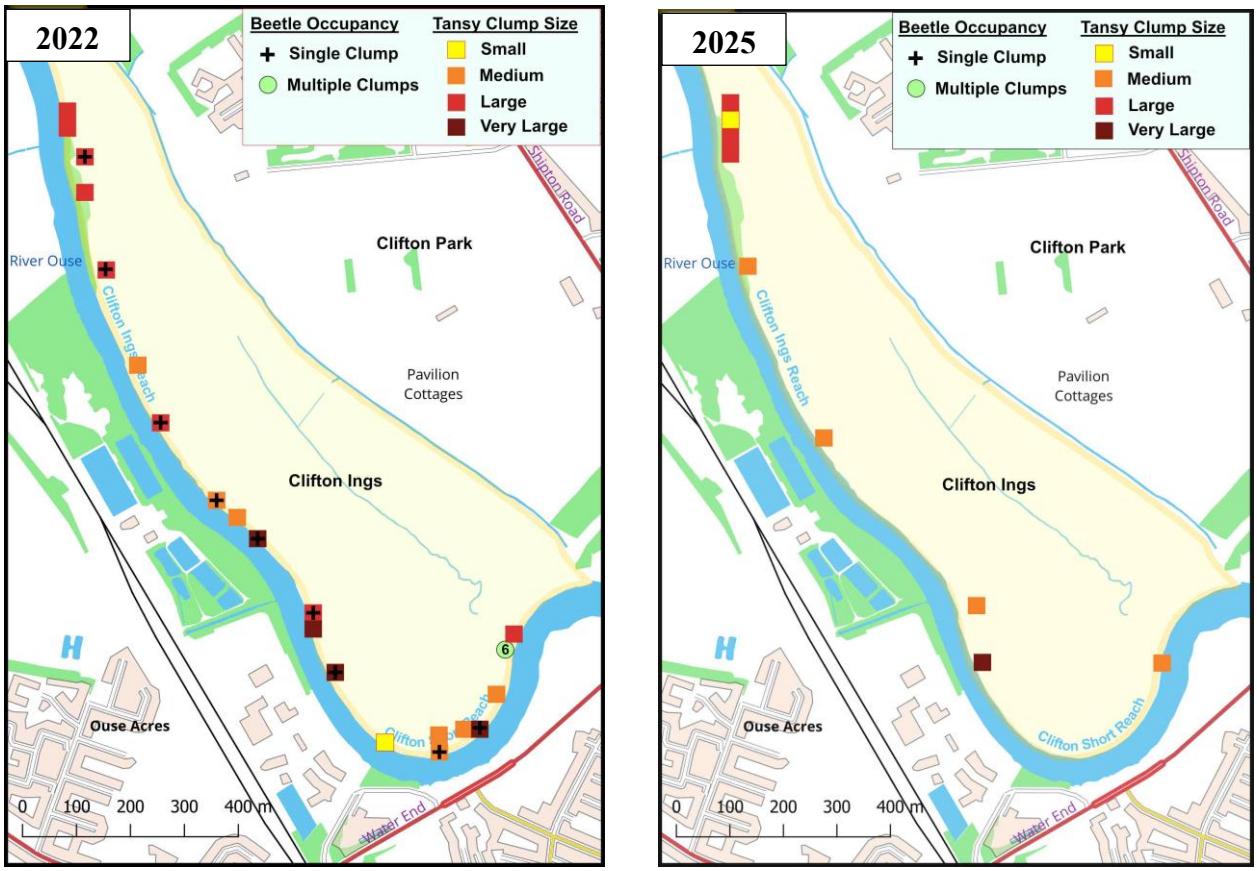
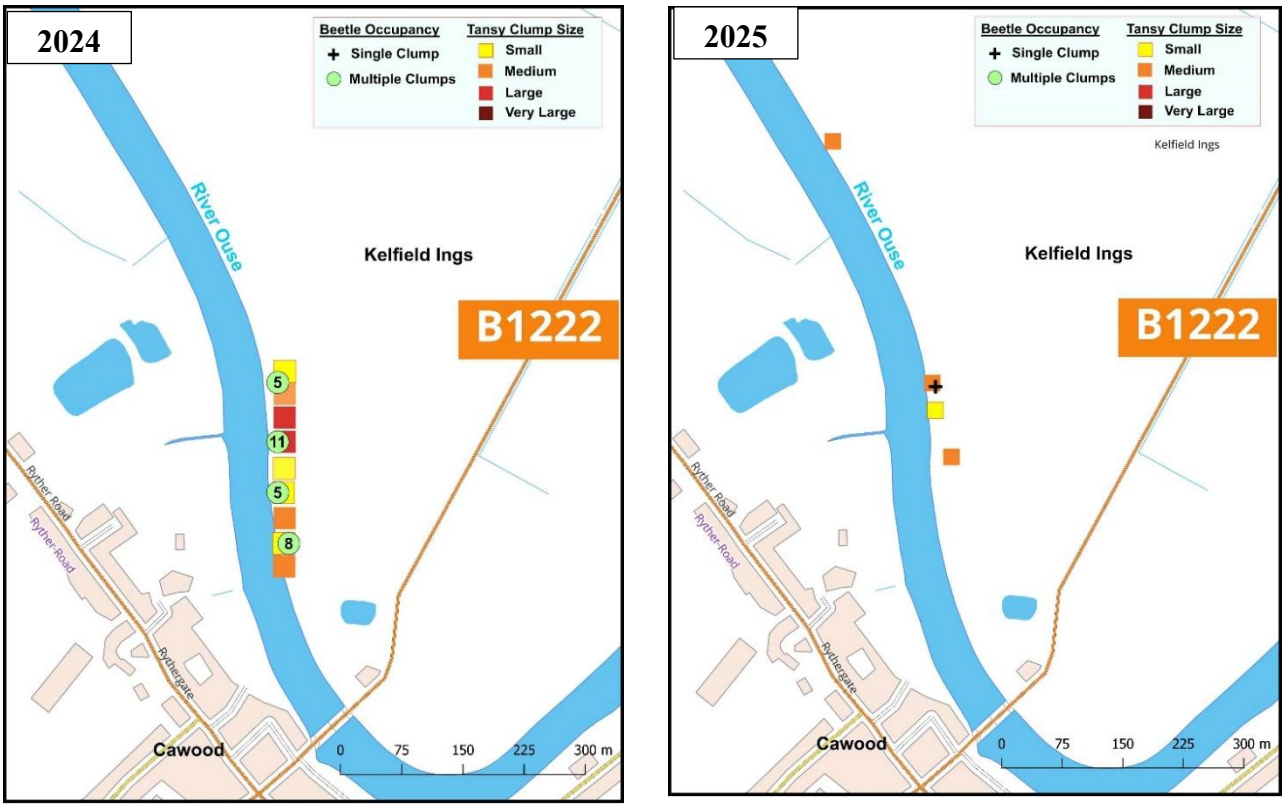


Figure 37. Beetle Occupancy and Tansy Clump Size at Kelfield Ings in 2024 and 2025



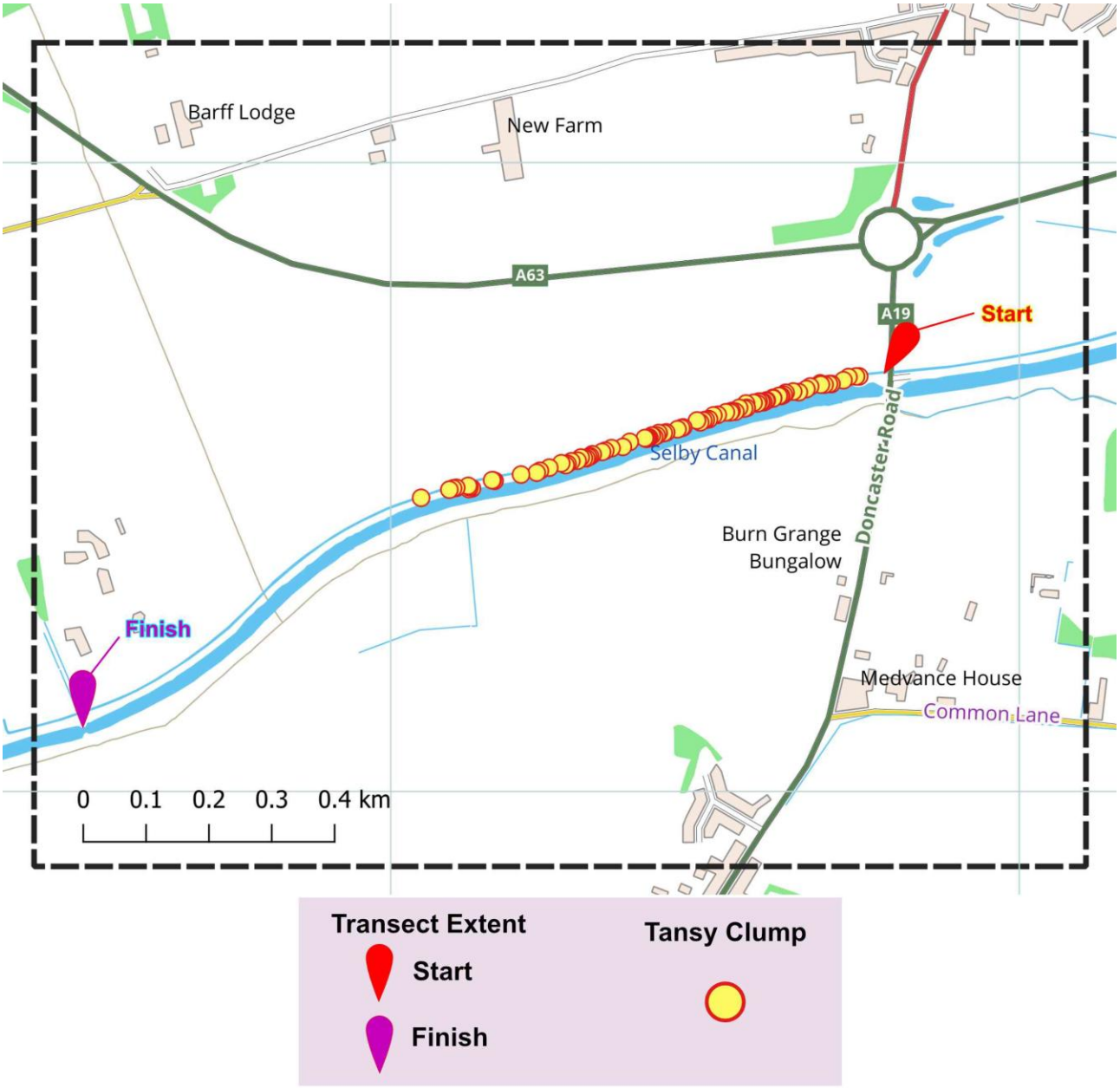
In comparison, where this disturbance has been maintained via annual mowing, Tansy clumps have persisted or expanded. This is because Tansy is a plant species that relies on open, periodically reset swards, so mowing effectively mimics natural disturbance processes and helps it to thrive. Thus, at South Ings the EA utilise annual mowing to allow extensive areas of Tansy clumps to persist, thereby creating what has become the most important site for Tansy beetles in the UK. Without annual mowing at South Ings this important habitat for the Tansy beetle would be lost. Therefore, the EA in future will be mowing the Tansy plants at Clifton Ings and Kelfield Ings in the late autumn to early spring when the beetles are underground. This situation is also relevant for enclosures and fenced areas, especially if they are away from the riverbank. If there is no natural disturbance within these sites there is a high risk the Tansy plants will be lost, so an annual mowing regime is strongly recommended.

ARK & EDUCATIONAL POPULATIONS

At present, there are five 'official' ark and educational sites for Tansy Beetles. Three of these sites have viable Tansy Beetle populations, whilst the other two still require further work to maintain a sustainable Tansy Beetle and/or Tansy plant populations. In addition, there are another two ark/educational sites still in their infancy, establishing Tansy plants and developing their sites for suitable colonisation by beetles. Ark sites are intended as an insurance measure, unaffected by any flooding on the river Ouse.

Selby Canal, Selby (SE596295):

Figure 38. Selby Canal Ark Site



Selby Canal Ark Site surveyed by: -

Barry Graham (New surveyor for 2025).

Table 35. Selby Canal Ark Site Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total clumps	Occupied clumps	Beetle count	Occupancy value	Survey date	Main management
North bank	84	46	320	55%	24/8/2024	Mown
North bank	90	0	0	0	5/9/2025	Mown

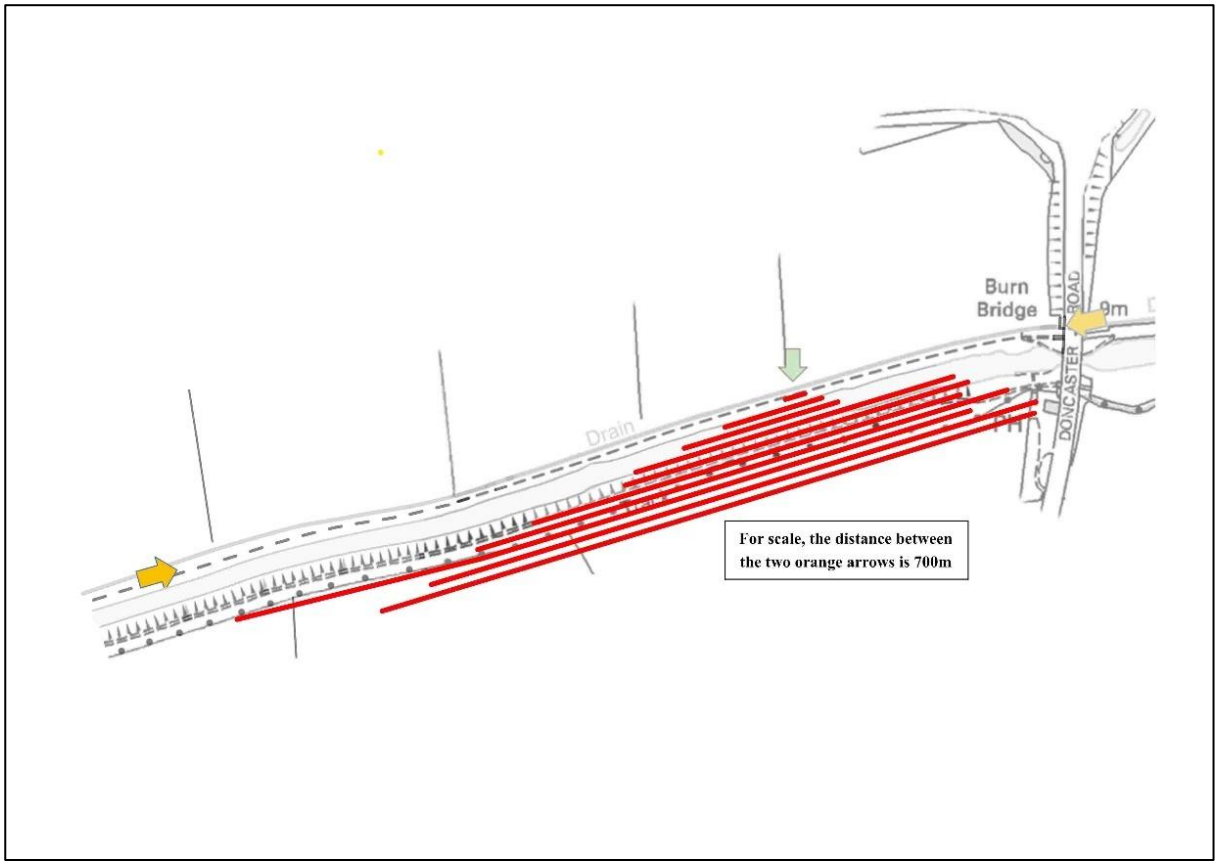
Survey Assessment: -

Survey results for Selby Canal Ark Site are shown above in **Table 35**.

Locations of Tansy plants along the north bank of the Selby Canal are shown in **Figure 38**.

Regarding alternative food plants, a single Marsh Woundwort stand was recorded in 2024 but none were seen in 2025.

Figure 39. Tansy beetle spread along the drainage ditch and canal side of the Selby Canal from 2015 to 2024



The population on the Selby Canal was established in spring, 2015, at the position shown by the green arrow (**Figure 39**). The aim was to create an ark site that is adjacent to water but not liable to flooding. Tansy along this stretch is almost continuous and therefore provides an ideal habitat. The series of red bars represents the range of the beetle in the Augusts of 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023 and 2024 respectively (from top to bottom). Due to the absence of beetles in 2025 there is no red bar for that year in **Figure 39**.

Despite the absence of beetles there was a slight increase in the number of Tansy clumps from 84 in 2024 to 90 in 2025 (**Figure 39)**. However, the canal bank is now regularly mown to promote public access and fishing. This means that the only Tansy plants not cut are those close to the water's edge. Thus, this cutting regime may have seen the demise of the Tansy Beetles along the Selby Canal. Nevertheless, it must be stressed that the survey was done on the 5th September and in view of June Whittaker's phenology survey (**Page 73**) concerning Tansy Beetles going underground from late July, this could also have contributed to the absence of observable beetles.

York Museum Gardens, York (SE598521):

In 2023, the original Tansy patch (**Figure 40**) next to the gardeners' buildings was weeded and all accumulated rubbish removed. Two new Tansy patches (**Figure 40**) utilising local plants were created just west of the original Tansy patch. The intention was to allow these new patches to expand and eventually link up with the original patch, thereby creating a large stand of Tansy plants providing plenty of cover and food for the Tansy Beetles prior to their re-introduction. However, in 2024 an assessment of the Tansy patches revealed the linkup of the new Tansy patches with the original patch was going to take longer than expected, so more Tansy plug plants were introduced to fill the gaps and speed up the linkage in 2025. Finally, the plan in 2026 is to fence off the merged Tansy patches which covers an area of approximately 20 square metres. If all goes to plan the next phase is to consider introducing Tansy Beetles in the Spring or Summer of 2026.

Figure 40. Tansy patch locations in the York Museum Gardens

Following the Tansy Beetle introduction, plans will be made to introduce on-site interpretation material and engage directly with the public about the Tansy Beetle.

Askham Bryan College, Askham Bryan, York (SE549474):

The College has two ark sites (Wildlife Park Arc Site and Farm Ark Site). The Wildlife Park Site is accessible to visitors within the College Park.

Beetle Counts

Looking at **Table 36** it is evident that beetle numbers counted and frequency of recordings are rather low. These factors along with likely fluctuations in numbers recorded will further detract from being able to determine confidently any patterns such as the first and second periods of beetle emergence. Despite this, the continued presence of Tansy Beetles confirms the suitability of these sites for retaining a beetle population. Finally in both years, the Farm site always counted more beetles overall than the Wildlife Park.

Table 36. Tansy Beetle count comparisons between 2024 and 2025

Tansy Beetle counts in 2024

	Wildlife Park Site	**Farm Site**
3rd April	3	68
6th May	7	73
2nd June	12	31
7th July	5	18
3rd August	3	9
5th September	9	16
Total	39	215

Tansy Beetle counts in 2025
(Counts in 2025 were conducted in the first week of the month)

	Wildlife Park Site	**Farm Site**
April	7	43
May	14	51
June	7	33
July	15	10
August	9	0
September	3	0
Total	**55**	**137**

Management of Tansy Beetle Ark Sites

Fences were patched to prevent rabbits eating the fresh Tansy during planting sessions which took place at the Tansy Beetle Jamboree on August 16th. Weeding took place throughout the two weeks prior to the festival to give space for new plants.

Proposed community involvement in site maintenance, beetle introduction, part of school educational visit.

The existing Tansy patch perimeter fence is being taken down as it has become difficult to maintain. T-Level students will be rebuilding the fence during their practical assessments between January and February 2026.

Proposed or ongoing marketing regarding events, leaflets, signage to site and may interpretation panels.

Last year the College collaborated with St Nicks to put on a jamboree held on the 16th August. Luke Durston chatted with BBC radio Sheffield and BBC radio York about the Tansy Beetles and the festival. Plans are being made to run the event again during the summer of 2026.

University of York St. John Sport Fields, York (SE661543): The preparatory work to establish a suitable Tansy Beetle ark site along with unsuccessful introduction of Tansy beetles has been discussed in earlier Survey Reports (Louis, 2022 and 2023). Another introduction was done in 2023 (Louis, 2024) appears to be more successful as 3 beetles were spotted in 2024.

Table 37. River Fosse West Bank Survey Results for 2024 and 2025 (grey highlight) for comparison

Location	Total Clumps	Occupied clumps	Beetle count	Occupancy value	Survey year	Main management
West Side of river Foss	51	3	3	6%	20/8/2024	Parts mown in late November, rest left wild
West side of river Foss	61	1	1*	1%	11/8/2025	Parts mown in late November, rest left wild

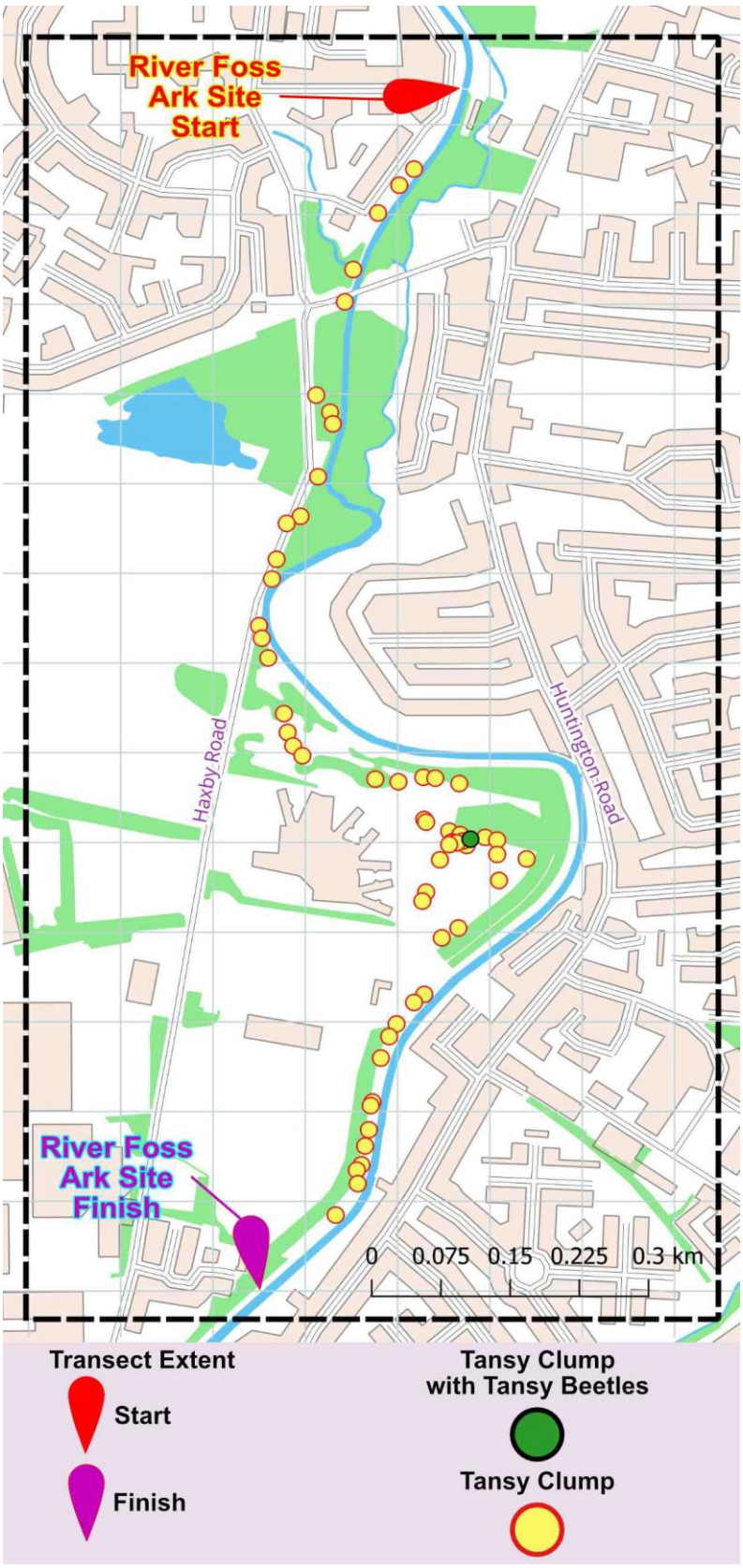
* It must be noted that the surveyor could not positively identify the beetle as it unfortunately fell into the undergrowth with only its ventral side in view for a short moment. In view of this, a survey in 2026 may confirm the continued presence of a Tansy Beetle population or its demise.

Survey Assessment: -

Survey results for the river Foss Ark Site are shown above in **Table 37**.

Locations of Tansy plants with and without Tansy beetles along the Ark Site are shown in **Figure 41.**

Figure 41. Extent of the River Foss Ark Site



Bugtopia Hornsea Zoo, Hornsea (TA202462): Bugtopia Hornsea Zoo (BHZ

Regarding Tansy Beetle conservation, Bugtopia Hornsea Zoo are at present constructing their display area which will comprise an enclosure to house a number of Tansy plants hosting a Tansy Beetle population along with areas for additional Tansy plant propagation and an "off show" beetle rearing area. The project also intends to include interpretation and educational information together with talks as part of the existing “Encounter” timetable used to educate the public. Further information on the project is covered in a previous Tansy Beetle Survey Report (Louis, 2023).

In 2025 discussions with the new landlords and incoming tenants ultimately led to Bugtopia securing an adjacent parcel of land as part of their lease. The site will initially be used for cultivating Tansy plants, with plans to construct a dedicated conservation enclosure in the near future alongside the addition of other animal enclosures and wildlife areas as part of the zoo expansion.

In the meantime, public awareness of the Tansy Beetle and its conservation needs are being strengthened through daily educational talks and invertebrate encounter sessions delivered to visitors. These presentations emphasise the misunderstandings surrounding many invertebrate species and their ecological importance in the environment. The Tansy Beetle is used as a key example to illustrate these conservation challenges.

The Zoological Society of East Anglia (ZSEA), Banham, Norwich (TM056873):

The Zoological Society of East Anglia is expanding its support for native species through a collaborative project with the Tansy Beetle Action Group.

The collaboration initially began in 2023 with the introduction of fifteen Tansy plants at Banham Zoo to start propagating the foodplant on site for a potential future collection of Tansy beetles. This collection was intended to support research into different aspects of the species’ ecology, while also providing educational opportunities to raise awareness of the beetle and the conservation work surrounding it.

In partnership with Natural England, a successful funding bid in 2025 initiated the development of several outdoor enclosures at Banham Zoo. These will house beetles from both the River Ouse and Cambridgeshire fenland populations in separate enclosures with identical setups. This will allow for comparisons in dietary preferences between the populations and provide insight into overwintering behaviour. Construction of the enclosures began in early 2026 in preparation for Tansy Beetles in the spring.

Beningbrough Hall, Beningbrough, York (SE517585):

Assessment of the Orchard and South Border sites at Beningbrough Hall in 2024:

South Border: A clump of Tansy plants was planted at the East end of the site in 2023. The South Border is located opposite the Orchard Tansy patch, separated by only a beech hedge and a path. Since no Tansy beetles were introduced to the South Border, it is believed they migrated across on their own. Beetle numbers in the Spring and early Summer are shown in **Table 38.**

Although beetles were seen during the Spring and early Summer in the South Border, no beetles were observed during the Summer suggesting that breeding was unsuccessful or maybe the beetles had simply over-wintered near the shelter of the south-facing wall before migrating across the path to the Orchard Tansy clumps.

Tansy Beetles were counted in the Orchard site during the August Tansy Beetle Event and on two separate days of counting obtained 65 and 73 beetles respectively.

Table 38. Beetle numbers at the South Border and Orchard sites at Beningbrough Hall in 2024

Date of Survey	Number of Beetles in South Border	Number of Beetles in Orchard
25th April 2024	9	14
29th April 2024	17	23
3rd May 2024	24	31
9th May 2024	18	34
19th May 2024	12	38
1st June 2024	9	36
9th June 2024	5	41

Assessment of the Orchard site at Beningbrough Hall in 2025:

2025 was a poor year for the Tansy Beetle population at Beningbrough Hall. The weather was very warm and dry and the clayish soil in the Orchard had baked hard. Tansy beetle numbers were very low in the Spring and early Summer, only reaching a maximum of 7 on one day of surveying. During the Summer, Tansy Beetle numbers never exceeded 2 in number during surveys. No beetles were recorded in the South Border during 2025.

ADDITIONAL STUDIES

Phenology – Bishopthorpe

June Whittaker continues with her important long-term phenology study of Tansy Beetle numbers within a Tansy patch near Bishopthorpe (SE464597). Her data for 2025 are shown in **Figure 42**. Data from previous years can be reviewed in earlier Survey Reports (Louis & Wilkins 2021, Louis, 2022, 2023, 2024 Oxford, 2020))

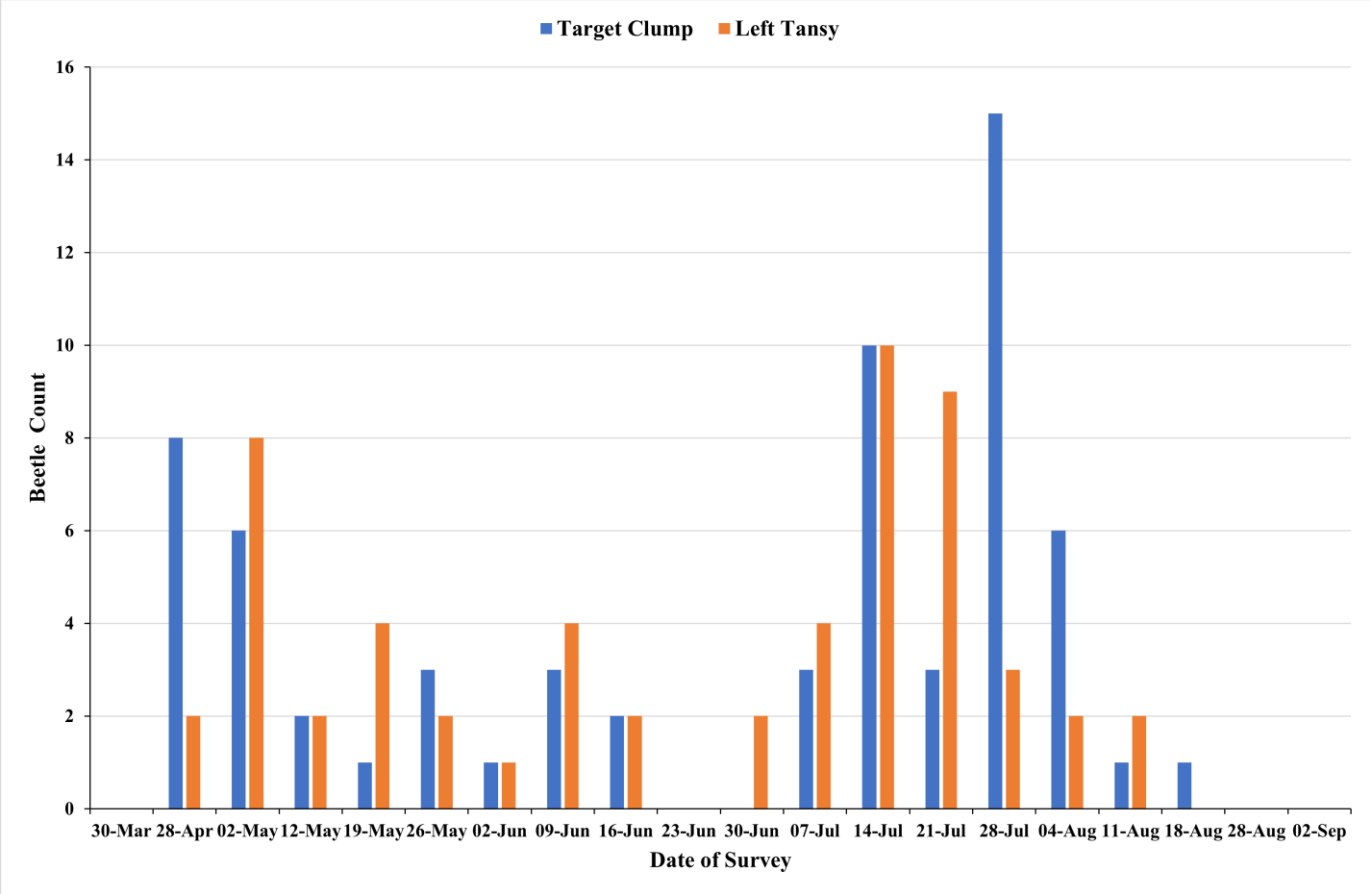
June has been recording the 'Target Tansy Clump' for a number of years, but from 2016 to 2018 the clump has suffered cutting by the farmer and a serious invasion by other plant species. To offset this situation, June started to record the Left Tansy clump from 2019 onwards which is 30 cm to the left of the Target Clump, divided by a very narrow path leading down to the river. The beetles can easily cross over from one clump to the other.

Compared with 2019, Tansy Beetle cumulative counts increased through 2020 to 2021, then dropped substantially in 2022 before climbing up in 2023, then decreasing again in 2024 followed by little change in 2025 (**Table 39**).

Table. 39 Yearly cumulative counts of Tansy Beetles on the Target and Left Tansy Clumps

Year	Target Tansy Clump	Left Tansy Clump
2019	125	161
2020	155	263
2021	337	298
2022	114	129
2023	125	159
2024	59	60
2025	65	57

Figure 42. Counts of beetles at Bishopthorpe in 2025 along with associated meteorological data



Both Tansy clumps comprised about 50% Tansy and the rest a variety of other plants, including Yarrow, (*Achillea millefolium*) Himalayan Balsam, Common Nettle, White Dead Nettle (*Lamium album*), Thistle (*Cirsium* spp.), Rosebay Willowherb, Common Mugwort (*Artemisia vulgaris*), Mayweed (*Matricaria* spp.) and various grasses. Willows (*Salix* spp.) located between the river and the Tansy, had been coppiced in 2025 allowing more light to reach the plants.

A noticeable finding from this phenology data is the timing of the second peak in beetle numbers which is at the back end of July and then beetle numbers rapidly drop before disappearing just after mid-August. This observation is crucial as it questions the suitability of the current survey window

(7th August to 7th September) used for surveying beetle numbers along the river Ouse transects. The survey window issue is discussed in Survey Window Suitability on **Page 54**.

Phenology - Beningbrough

Rosie Robinson-Pethullis surveyed Tansy Beetles on Tansy clumps growing on a 2-metre square patch of river sand near the confluence of the river Nidd with the river Ouse in the Beningbrough Hall Estate (SE 513579).

Figure 43. Number of beetles present on a 2-metre square patch containing Tansy clumps located adjacent to the river Nidd Ouse Confluence in 2025

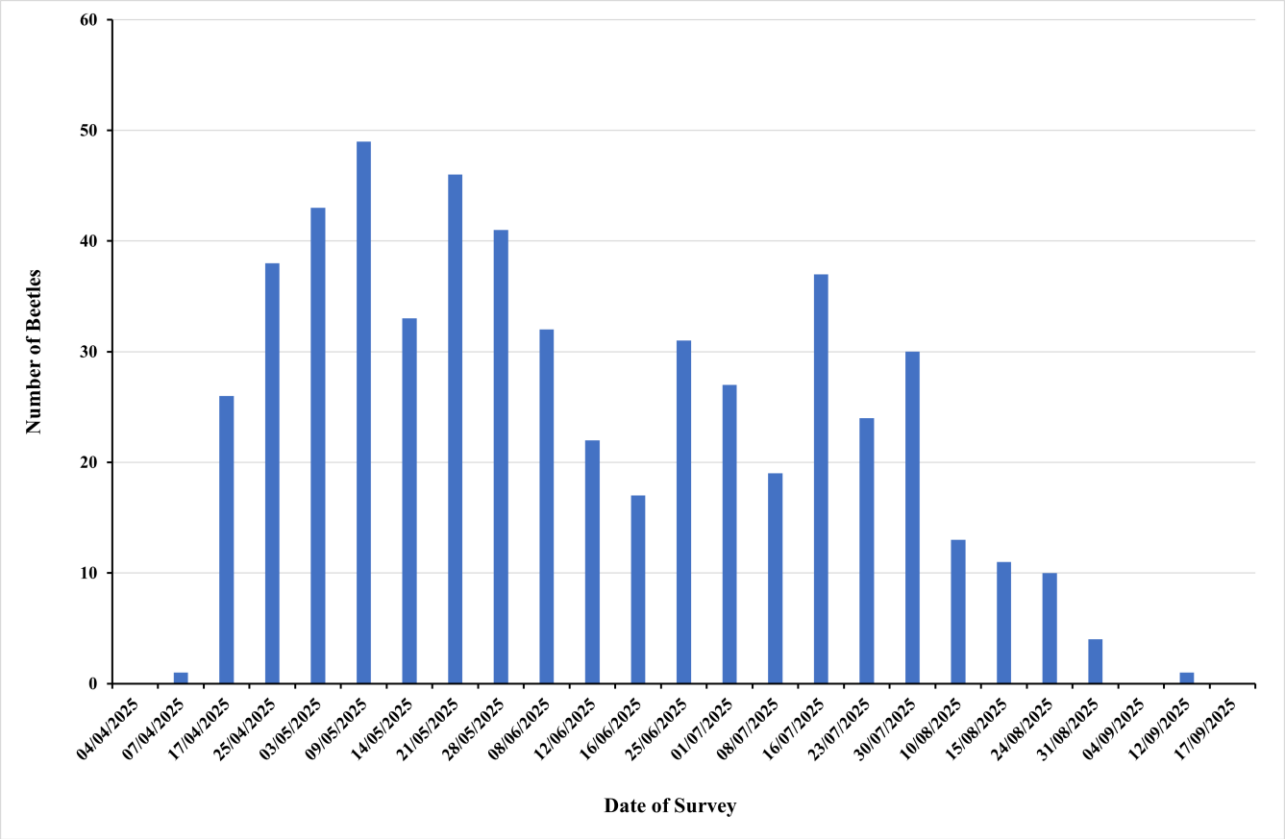
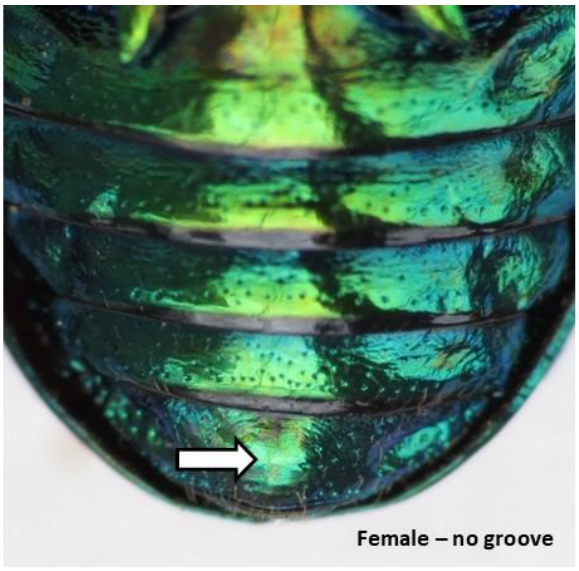
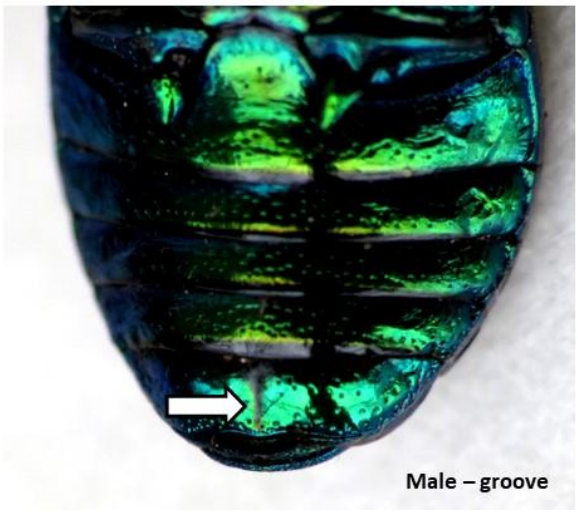


Figure 43 clearly shows the emergence of Tansy Beetles in the Spring with their numbers peaking in early Summer. However, during mid-Summer, the expected reduction in beetle numbers appears to have taken place but was not accompanied by another definite peak of emerging beetles. These beetles would have come from larvae that had gone underground to pupate in June and then emerge as adults in late July. Despite this, the highest number of beetles recorded in the summer was around mid-July with numbers starting to drop off thereafter and then markedly so after the 1st August.

The above findings from both the Beningbrough phenology study (**Figure 43)** and the Bishopthorpe study (**Figure 42**) suggests it might be prudent to shift the survey window (7th August to 7th September) back for Tansy Beetles along the river Ouse, as beetle numbers are rapidly decreasing after the 1st August. The survey window issue is discussed in Survey Window Suitability on **Page 54**.





Determining the sex of Tansy beetles requires an examination of the posterior sternite of the abdomen which is plain in the female and grooved in the male

TANSY BEETLES IN THE FENS

Woodwalton Fen, Woodwalton, Huntingdon (TL231847):

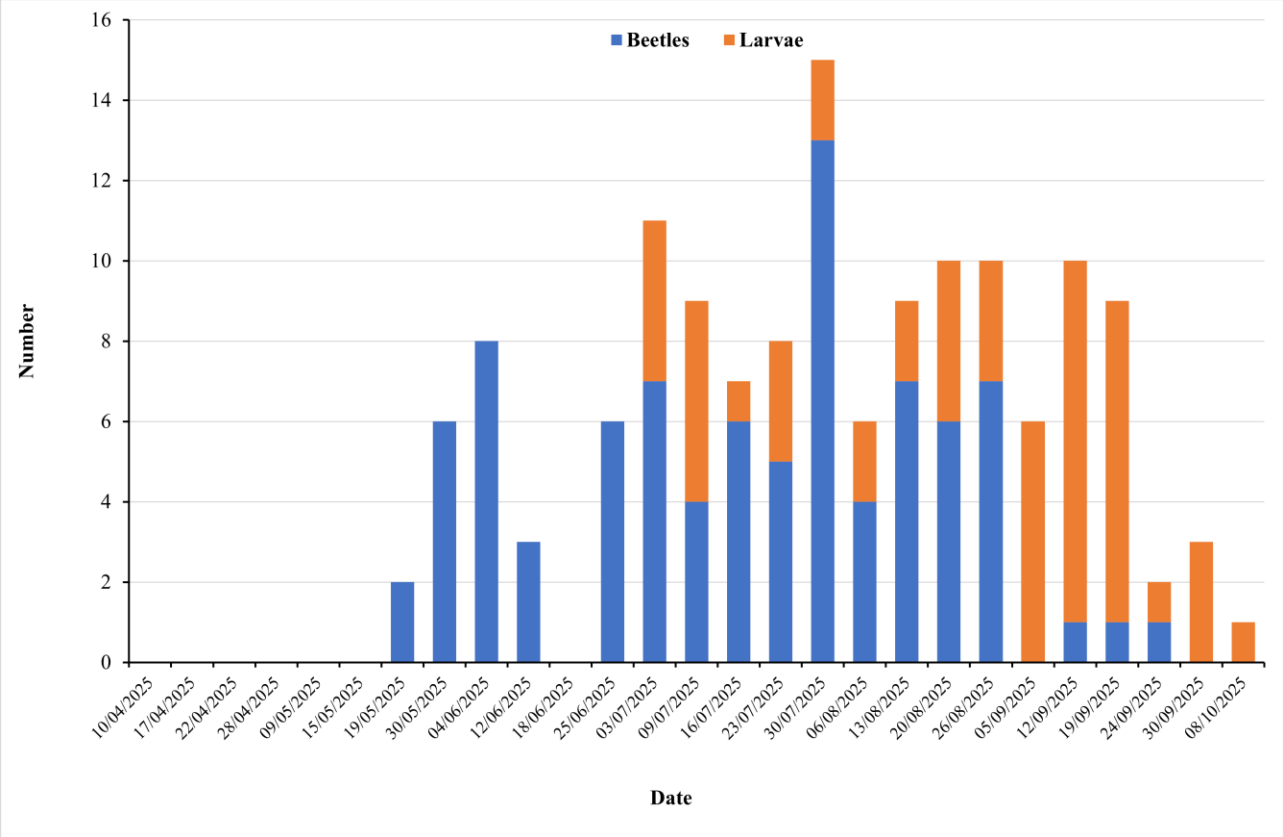
Main Surveys

As in previous years, the main survey comprises regular transects for Tansy Beetles conducted along the ride edges in the central part of the reserve. The transect route was the same as that used for the previous three years (2021 – 2024), that is:

- The circumference of the pond in the north-western part of Compartment (C) 49
- The western edge of C49
- The northern and western edges of C53
- The northern and western edges of C57
- The western edge of C60 (both sides of path)
- The northern edge of C52 and the short path used for bird-netting within C52.

The counts for 2025 are shown in **Figure 44**.

Figure 44. Woodwalton Fen transect counts in 2025



A total of 27 transects was conducted in 2025, starting on 10th April and finishing on 8th October, and yielded a total of 87 beetles and 54 larvae. The complete data set is plotted in **Figure 44** and

includes both wild and released captive beetles along with larvae. The counts were significantly augmented by the release of almost 100 captive-reared beetles along the transect route in 2024 and 2025, with the releases occurring at intervals between April and August (**Figure 45**). Released beetles were initially colour marked either by paint or Sharpie pen; later releases had sections cut out from their elytra. The former method had a limited life span, so distinguishing between wild and introduced beetles was difficult in the later survey dates. It is also important to note that the dataset almost certainly includes repeat sightings of the same beetles and larvae, so should not be used to assess the total population.

Figure 45. Captive Tansy Beetle release locations in 2024 and 2025 including numbers and dates

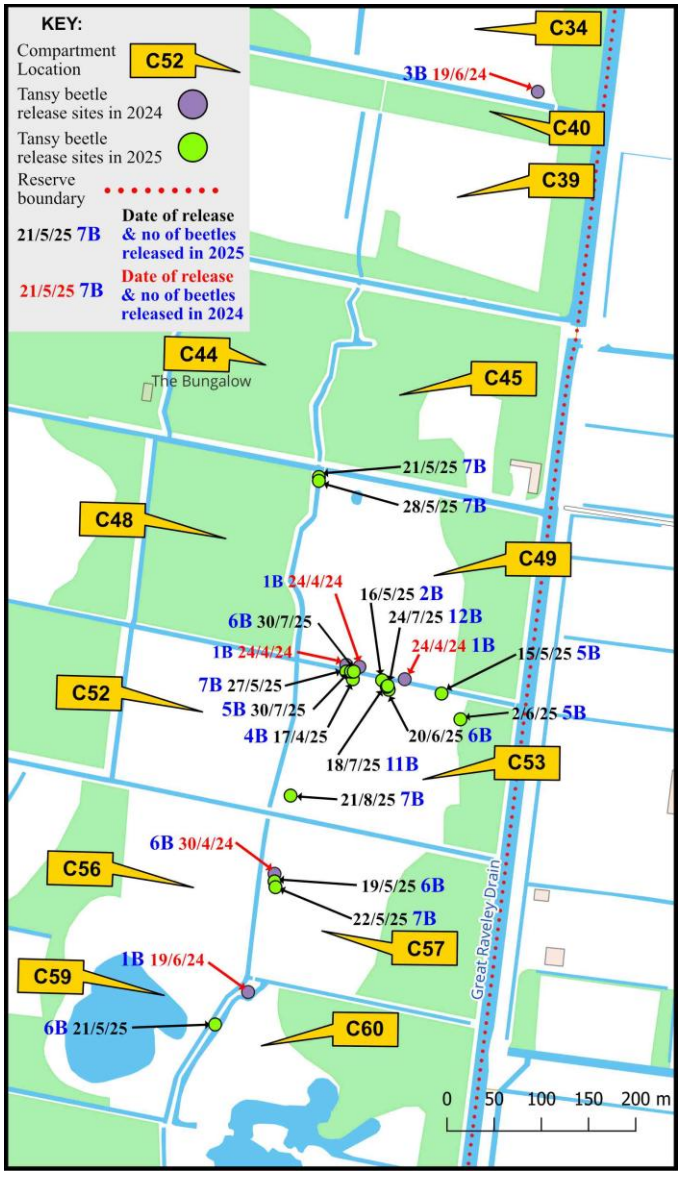


Figure 46 shows all wild beetle sightings from the main survey transects in 2024 and 2025 transects. Considering 2025, the majority of the records (87%) were from Water Mint, the remainder from Gipsywort and Hemp-nettle. One notable improvement in 2025 was two beetle records on Hemp-nettle from the northern edge of C57, on 30th July and 20th August. There was a single beetle

recorded in this area during an ad-hoc survey in 2024. Since no beetles have been seen at this locality since 2021, these sightings could be associated with the return of Hemp-nettle to this section.

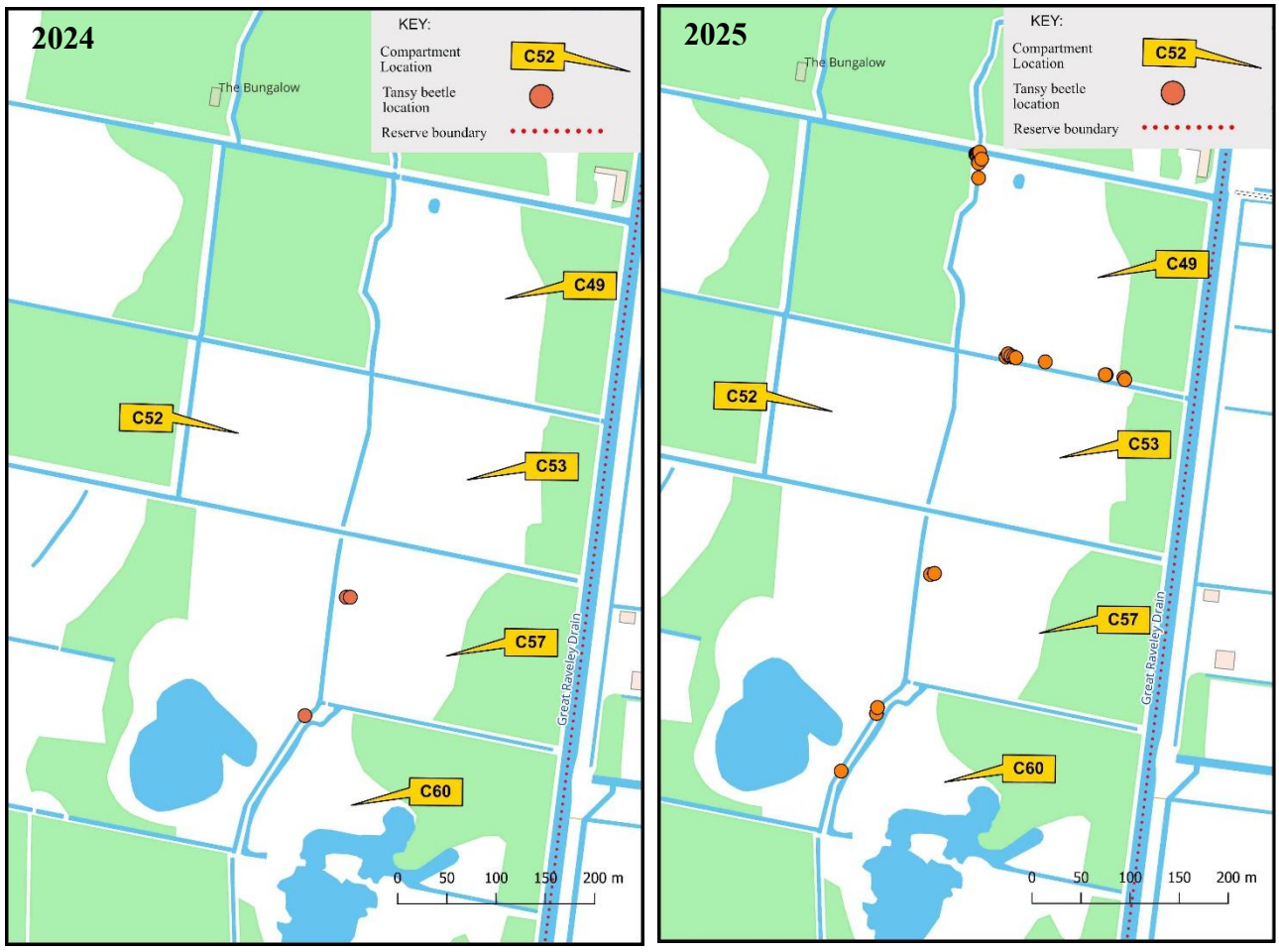
Figure 46. Woodwalton Fen NNR, showing the location of all wild beetle sightings from the transects in 2024 & 2025.

No Tansy Beetles were recorded along the northern edge of C53 in 2024 so it had been assumed their presence in 2025 were probably from captive-reared introductions. A similar situation also prevailed along the edge of the drain on the western edge of C49. However, mating pairs of beetles were recorded along this section on 16th July and 20th August, with larvae subsequently being recorded, so it is likely that this section of the transect route has been successfully re-populated. Along the western edge of C57, the picture is more complicated, as captive-reared beetles were released here both in 2024 and in 2025 **(Figure 47).** However, only three beetles were recorded from the section along the western edge of C57 included in the transect route, and two of these were clearly marked (**Figure 47**). Only one beetle was recorded around the edges of the pond in the north-western part of C49 in 2025, compared with three in 2024.

With regard to the 37 captive-reared adult beetles released along the northern edge of C53 between 15th May and 30th July (**Figure 47**), none were recorded after 26th August. This contrasts markedly with the situation along the western edge of C49 (the original 'hotspot') where beetles and, later, larvae were recorded right up to the final transect on 8th October.

When all marked and suspected captive-reared beetles are excluded from the transect records, the dataset leaves only 25 beetles from 21 transects (excluding the first six transects that failed to produce any beetles); an average of only 1.2 per transect, a slight increase on the 2024 season (15 beetles from 15 transects, or one beetle per transect).

Figure 47. Woodwalton Fen NNR, showing the location of all released marked beetle sightings from the various Main Surveys in 2024 & 2025.



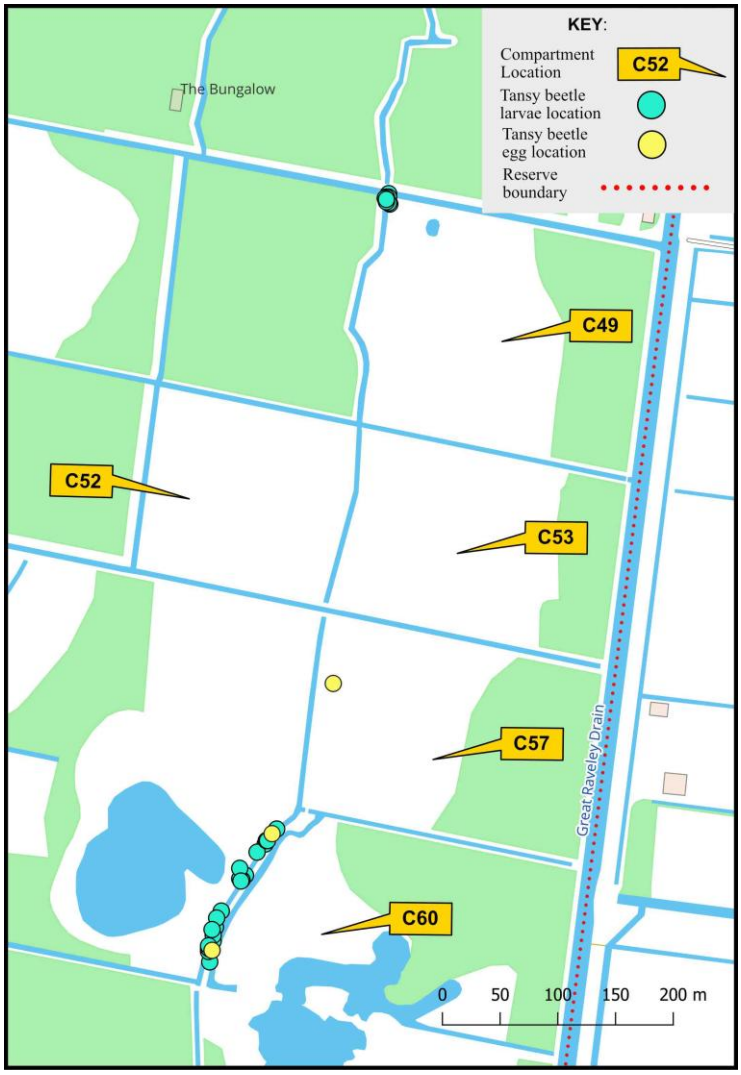
Of note was the finding of three clutches of Tansy Beetle eggs, the first-time eggs have been recorded at Woodwalton Fen since surveying began in 2017. The first clutch of 12 eggs on a *Phragmites* reed was found on the 4th June along the western edge of C57. The two other egg clutches were both found along the western edge of C60, on Water Mint. The first was found on 3rd July and comprised three eggs; the second comprised six eggs and was recorded on 30th July (**Figure 48**). Locations for larvae and eggs spotted in 2025 are shown in **Figure 50**. As no eggs or larvae were sighted in the 2024 main survey, a location map has not been included.

The clutch of eggs seen on 30th July was examined again on 6th August, and were seen to be very close to hatching, with the developing larvae clearly visible through the eggshells. When revisited on 7th August, all six eggs had hatched, but only three larvae remained and appeared to be either resting or feeding on the empty eggshells (**Figure 49**).

Fig. 48. A clutch of six Tansy Beetle eggs on the underside of a Water Mint leaf. July 30th, 2025.

Figure 49. Newly hatched Tansy Beetle larvae feeding on their empty eggshells on the underside of a Water Mint leaf. From the same clutch of eggs seen in Figure 48

Figure 50. Woodwalton Fen NNR, showing the location of all egg and larvae sightings from the various Main Survey transects in 2025.



Ad Hoc Tansy Beetle Surveys

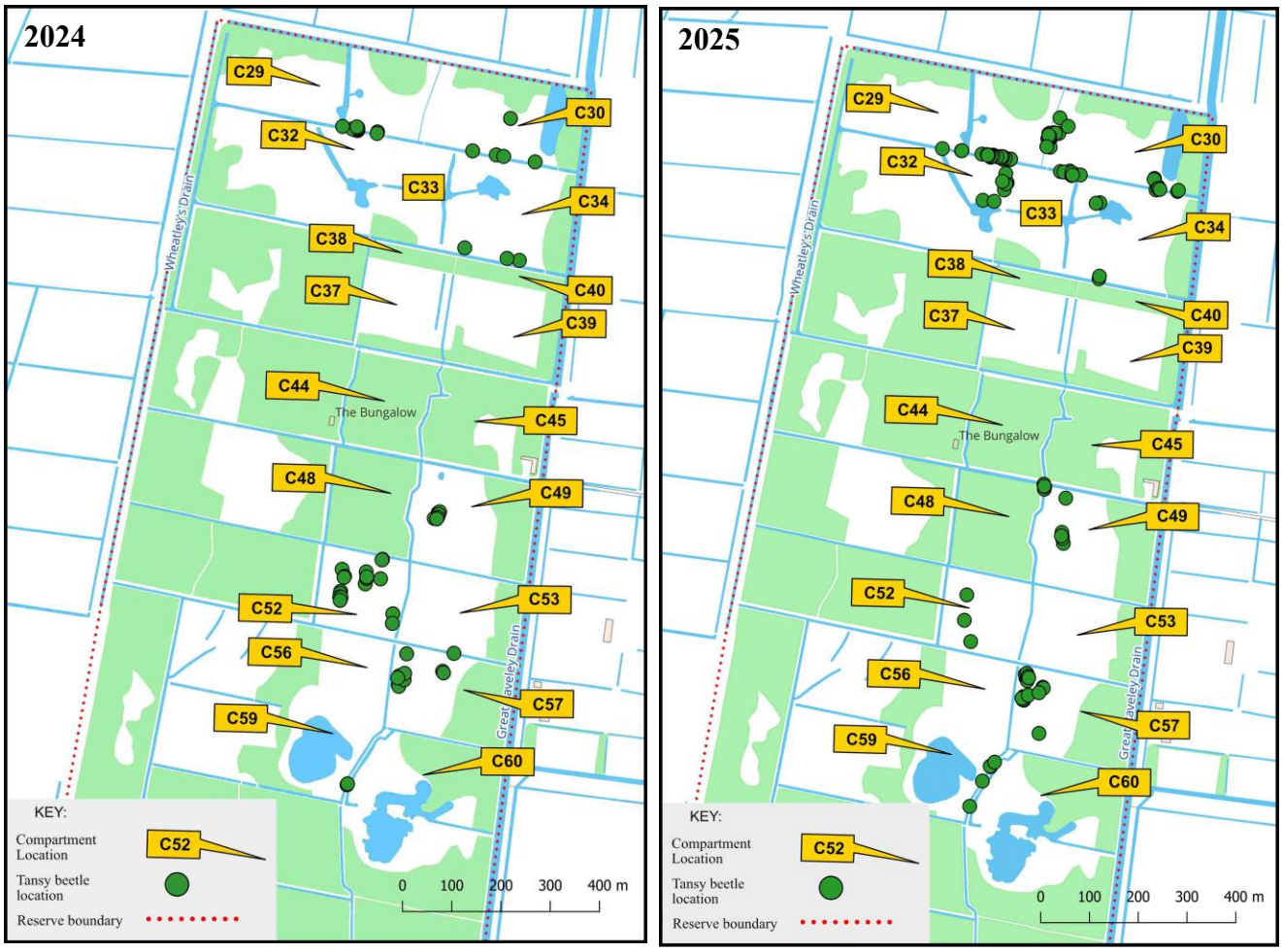
A comparison between ad hoc surveys done in 2024 and 2025 is shown in **Figure 51** for beetles while **Figure 52** shows the locations for larvae and eggs in 2025.

Away from the transect route, ad hoc surveys through an approximately 16m-wide section along the western margins of C57 showed small numbers of beetles, with a high count of six being recorded on 30th July. Food plants here include Gipsywort, Hemp-nettle and Water Mint, with a very dense patch of Water Mint near the NW corner of C57, consistently producing beetles. The bird-netting paths within the western part of C49 also produced small numbers of beetles and larvae, with high counts of four larvae on 25th June and three beetles on 2nd August, indicating a breeding population.

Within the northern reedbeds (C29 – C34), an initial survey on 17th July, produced 9 beetles and two larvae. A second survey was conducted on the 7th August, after the aforementioned paths were cut, and subsequent surveys were conducted on an approximately weekly basis through to the end of the season. The 7th August survey yielded 11 beetles, including a single example of the rare bronze

morph (Hodgson, 2022), the first seen since 2021 and the first one ever recorded within this part of the reserve (**Figure 53**). What was almost certainly the same beetle was seen again in the same location on 27th August.

Figure 51. Woodwalton Fen NNR, showing the location of beetle sightings from the various ad hoc surveys in 2024 & 2025.

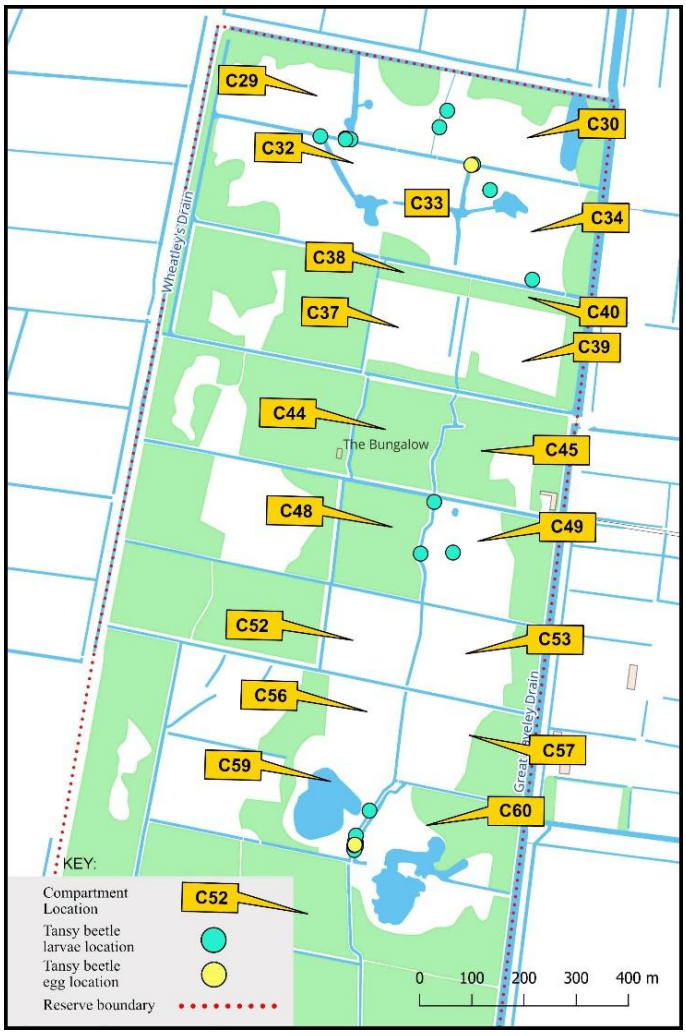


A survey undertaken on 22nd August produced 21 adult beetles and a clutch of seven eggs close to hatching. The eggs and all but two of the adult beetles were on Hemp-nettle, the two exceptions were on Water Mint.

A repeat survey of the Northern Reedbeds on 2nd October produced 25 adult beetles: 18 were on Water Mint and six on Skullcap (*Scutellaria*), the other was on a patch of dead Hemp-nettle. A week later, on 9th October, 22 adult beetles were recorded: 17 were either on or very closely associated with Water Mint or Gipsywort, the other four were on Skullcap. A single 4th-instar larva was also found on Skullcap, adding to evidence from previous years that Skullcap is an important Tansy Beetle food plant at Woodwalton Fen. The last beetles were recorded on 22nd October, with subsequent surveys on 5th and 13th November both proving negative.

The large numbers of beetles recorded within the Northern Reedbeds during 2025 marks a very significant increase over the numbers recorded there in 2024, with the increase coinciding with the reappearance of large amounts of Hemp-nettle, after an almost complete absence of this plant in 2024.

Figure 52. Woodwalton Fen NNR, showing the location of beetle larvae & egg sightings from the various ad hoc Surveys in 2025.



Elsewhere, a detailed survey of the central third of Compartment 52 was conducted on 25th September, to determine whether any beetles were still active, as this part of the compartment was scheduled for cutting. The survey revealed only two adult beetles, one resting on Hemp Agrimony growing amongst a patch of Water Mint and Gipsywort, the second on Marsh Woundwort. One striking feature was the extent of grazing evident on the Gipsywort plants within this part of the compartment, with the tops of most of the stems removed (**Figure 54**).

The grazing is most likely to be from deer, of which there is a sizeable population within the reserve and the surrounding area; mostly Chinese Water Deer (*Hydropotes inermis*) and Reeves' Muntjac (*Muntiacus reevesi*). Overgrazing of the Tansy Beetle's food plants by cattle and sheep has been shown to be a potential threat to beetle populations (Oxford et al., 2003), but the effect of grazing by deer has not been studied. Although there is no evidence to suggest that deer will do any more than snip the tops of stems, these appear to be precisely the parts of the plants favoured by adult beetles for egg-laying and as feeding sites for early-instar larvae. The latter in particular are most often found close to the tops of stems, feeding on the small axial leaves growing between the main stem and side stems.

Figure 53. The rare bronze morph of the Tansy Beetle. August 6th, 2025
© Julian Hodgson

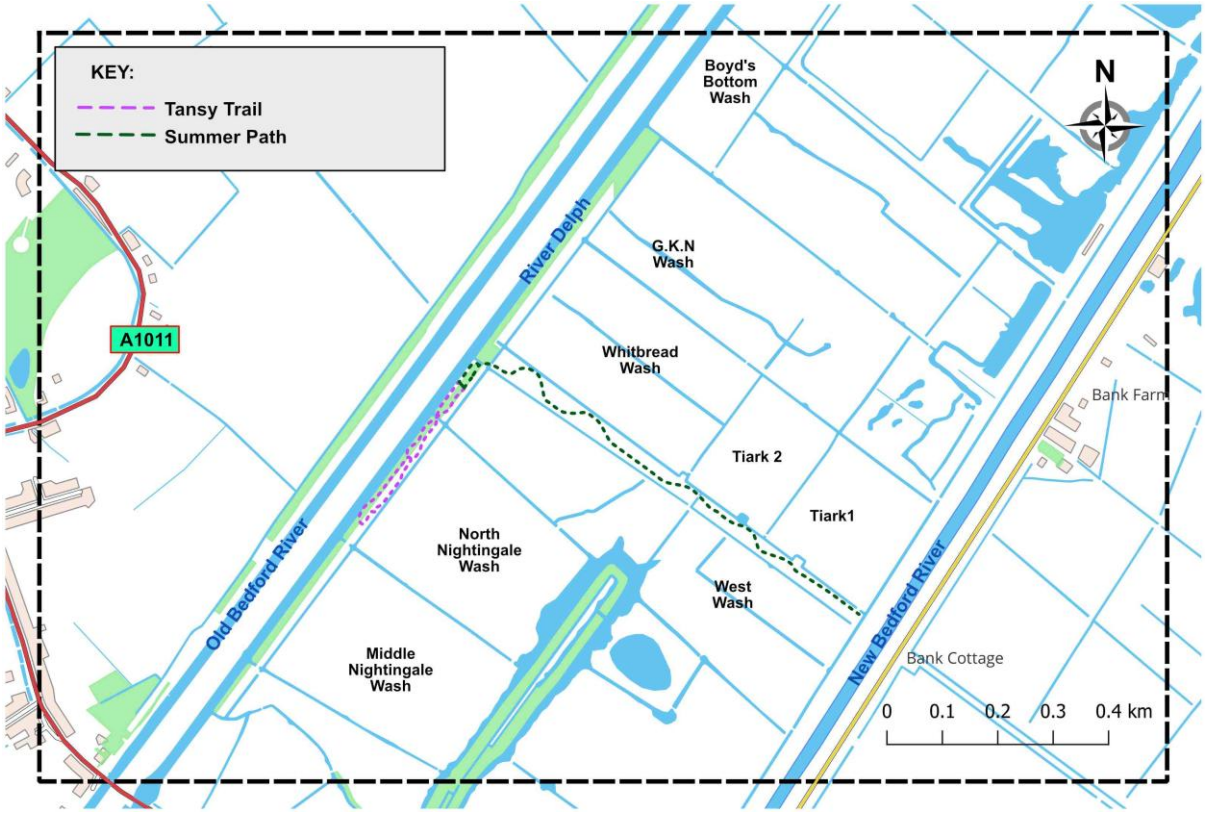
Figure 54. Gipsywort stem showing evidence of grazing, probably by deer. Compartment 52. September 25th, 2025.

Welney Fen (WWT Wetland Centre), Welney, Wisbech (TL545946):

Introduction

WWT Welney Wetland Centre is partly located on the 22 kilometres stretch of the Ouse Washes, utilised as a large washland for flood alleviation. The Ouse Washes is designated as a Special Protected Area (SPA), Special Scientific Site of Interest (SSSI), Special Area of Conservation (SAC) and a Ramsar site. WWT owns Welney Fen which comprises 1,000 acres of lowland wet grassland. The Tansy beetles are found along the 325 metre Tansy Trail which lies adjacent to the river Delph and is accessed via the Summer Walk (**Figure 55**).

Figure 55. Location of the Tansy Trail in Welney Fen



5 Tansy beetles were first recorded at this wetland site in August 2018 on the River Delph bank at the end of the loop of the Summer Walk. The beetles were actively feeding on Marsh Woundwort (*Stachys palustris)* and Water Mint (*Mentha aquatica)*. Following this observation there were two surveys, one in June, the other in August, each year to record beetle numbers, their locations and food plants (Lane., 2021).

Survey Methodology

The western end of the summer walk loop by the river Delph and the Tansy Trail was surveyed in 2025 by 2-9 surveyors (Samantha Instone (Warden, WWT Welney) (SI), Annette Littler (AL), Sarah Wolton (SW), Megan James (MJ), John Marrow (JM), Rozanne Marrow (RM), Jack Walton

(JW), Georgette Taylor, (GT) and Richard Wicks (RW) on two dates: 19th June and 13th August. The number of surveyors, time of survey and weather conditions are shown in **Table 40**.

Table 40. Tansy Beetle surveying dates, surveyors and weather conditions in 2025

Date	Time	Numbers of surveyors	Weather Conditions
19th June	10am-12:15pm	2 (SI, AL)	13-24C, clear sky, slight breeze
13th August	9:30am-12pm	9 (SI, SW, MJ, JM, RM, JW, GT, RW, AL)	13-27C, Clear sky, moderate breeze

Unlike the survey conducted in 2024 (Drewitt, 2024), the Summer Walk from Tiark 1 to the start of the end loop of the Summer Walk was not surveyed and the adjacent areas immediately to the northeast and southwest of the Tansy Trail were also not surveyed.

Results of 2025 Surveys

Locations of Tansy beetles, their larvae and mating pairs along the Tansy Trail and western section of the Summer Walk are shown in **Figure 55**. **Table 41** provides information on what plants the Tansy beetles and their larvae were residing on along with whether the site was shaded or exposed.

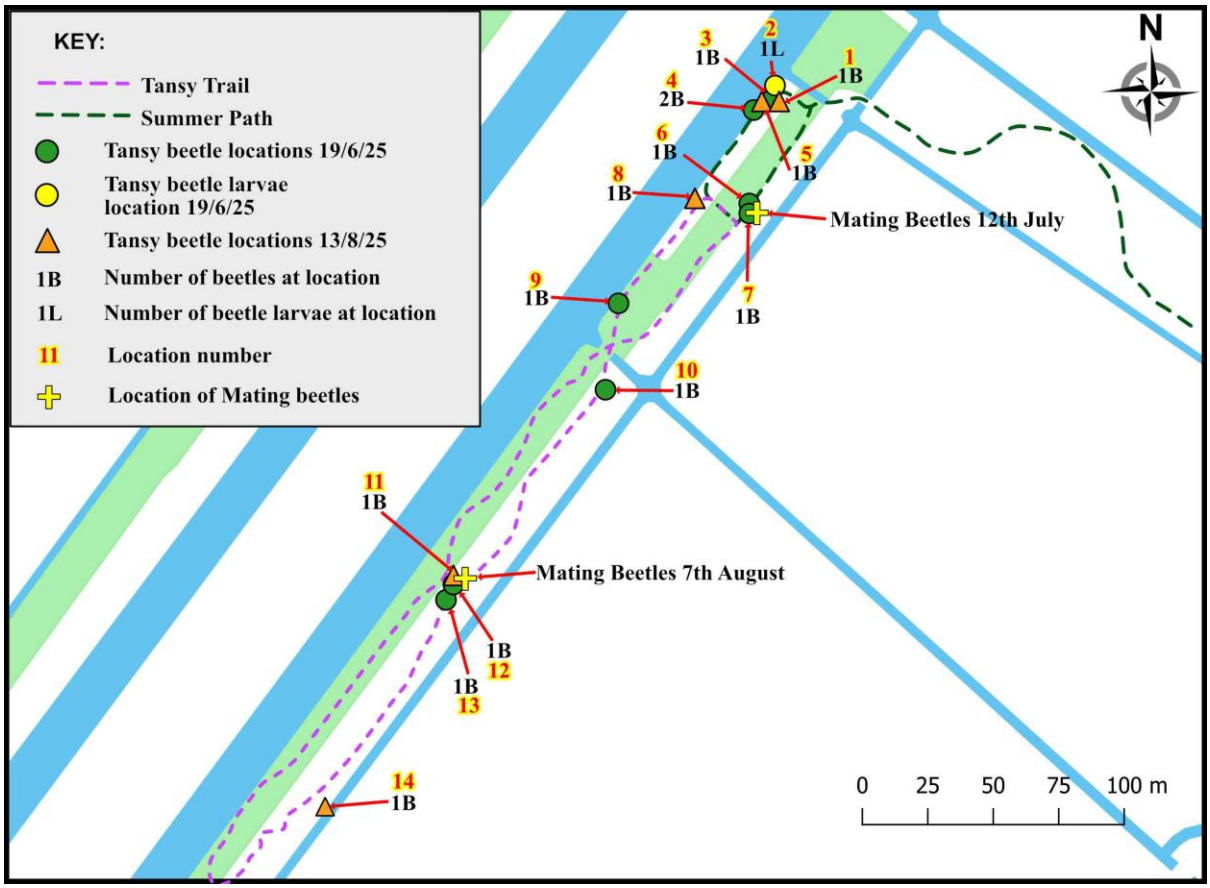
Table 41. Locations of Tansy beetles, their larvae, plant species found on and presence of shade at the sighting for the 2025 survey.

Date	Location	Plant species	Shaded/sunny
19th June	1	Marsh Woundwort	Sunny
	5	Marsh Woundwort	Open shaded
	8	Unknown	Shaded
	11	Unknown	Shaded
	14	Marsh Woundwort	Shaded
13th August	2	Unknown	Shaded
	3	Unknown	Shaded
	4	Unknown	Shaded
	6	Water Mint	Shaded
	7	Unknown	Shaded
	9	Reed	Sunny
	10	Marsh Woundwort	Shaded
	12	Marsh Woundwort	Shaded
	13	Reed	Sunny

In 2025, Tansy beetle locations were much more spread out than that seen in 2024. During the August survey, a Tansy beetle larva was recorded (**Figure 56**) on an unidentified plant towards the edge of the River Delph. The last larvae record was in 2023, halfway down the Tansy Trail.

The vegetation along the southern loop of the Summer Walk and the tansy trail was dominated by Nettle (*Urtica dioica)* Common Reed (*Phragmites australis)*, Yellow Loosestrife (*Lysimachia vulgaris)*, Bindweed (*Calystegia spp.)* and Trifid Bur-marigold (*Bidens tripartite)*. Water Mint was interspersed amongst this vegetation. Marsh Woundwort was abundant in areas where Tansy beetles were recorded in June and August (**Figure 56**).

Figure 56. Location of Tansy beetles and their larvae along the Tansy Trail and the looped west end section of the Summer Trail in 2025



Discussion

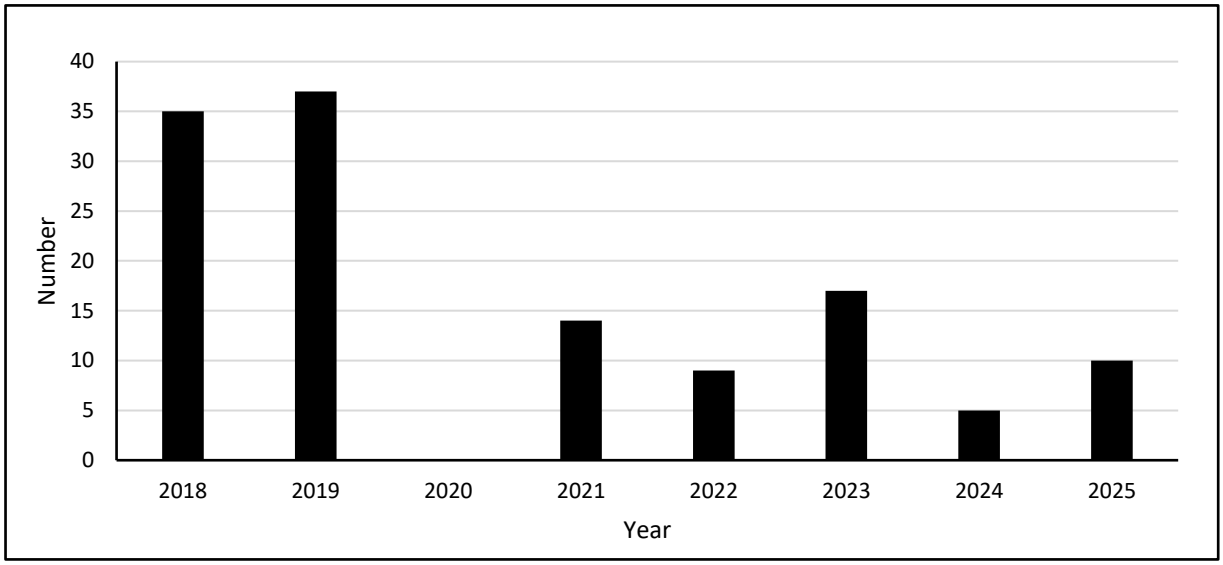
When comparing the maximum numbers of Tansy beetle recorded since 2018, 2025 showed 50% increase when compared with 2024. However, the 2025 numbers are still much lower than those recorded in 2018 and 2019 (**Figure 57**). Variation could be due to differences in survey methodology, timing, weather conditions and surveyor experience. Furthermore, Drewitt's reports from 2023 and 2024, suggests there was no clear relationship between the number of beetles recorded and the extent and duration of the flooding during the previous winters (Drewitt, 2023, 2024).

During the winter months of 2024/2025 the Washes were flooded and only became available for the bird breeding season from April onwards. As a consequence, habitat management started from mid-May and involved maintaining a 3m wide path along the Tansy Trail, removal of overhanging branches that obstructed the path and small-scale hand removal of Bindweed, Common Nettle and Common Reed. This continued throughout the summer months. In contrast to previous years, WWT

Welney experienced a drought in 2025 due to low rainfall, resulting in some plants being more stressed.

A new volunteer team was established in 2025 to provide additional support for wildlife recording at Welney. The team assisted with co-ordinating Tansy beetle surveys and ad-hoc sightings.

Figure 57. Total annual counts of Tansy beetles at Welney WWT



NB. No survey was undertaken in 2020 due to Covid restrictions.

Citizen Science

In 2025, the warden implemented a project to encourage visitors to search and record Tansy Beetles. The aims were to:

- Collect and record Tansy beetle sightings including individual numbers, location, time of day, weather and breeding behaviour (mating, eggs, larvae).
- Encourage visitation and exploration of the Summer Walk and Tansy Trail.
- Increase knowledge and awareness of the Tansy beetles

Starting on the 4th July 2025, a white board was located at the welcome desk with a picture of the beetle and a map of known beetle locations (**Figure 58**). Along the Summer Walk and Tansy Trail clip frames were positioned reminding visitors to search for and record Tansy beetles sighted (**Figure 59**). The following information was requested:

- Date and time of the sighting
- The location (using grid reference or what3words)
- What plant the Tansy beetle was found on?
- Photograph of the beetle for confirming species identity

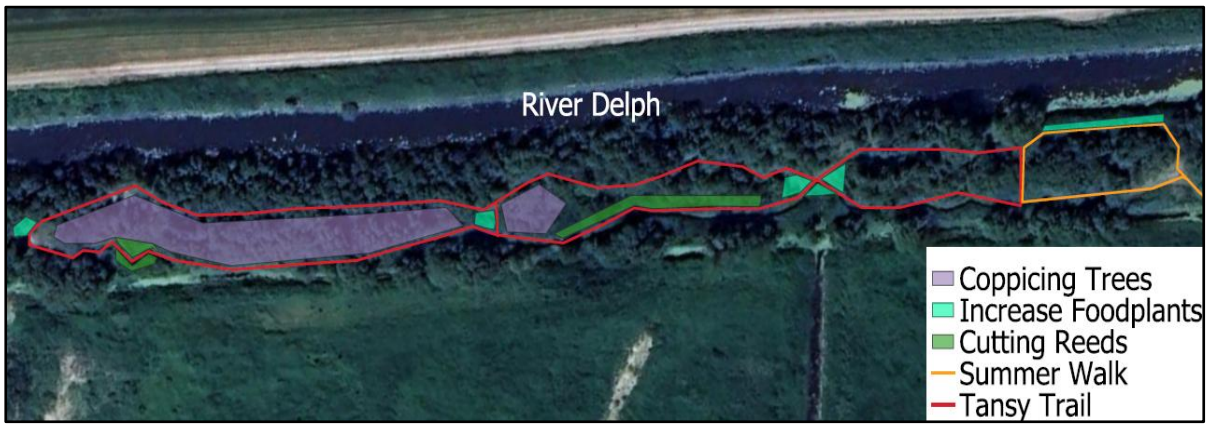
The feedback was positive from first time users and regular visitors and included comments on how quiet the trail was and the abundance of insects seen on it.

Recommendations

In 2026, habitat management will include the cutting and removal of less desirable vegetation (Common Reed, Nettles, Bindweed spp., Triffid Bur-marigold) and expand areas of suitable food plants utilising seed or plants sourced on site. Coppicing and thinning the indigenous willow will continue to reduce the amount of shade present and encourage growth of suitable food plants (**Figure 58**). The Trust will continue to encourage visitors to report Tansy beetle sightings and develop a series of storyboards to educate visitors.

Figure 58. Information boards to encourage visitor participation with recording Tansy beetle sightings

Figure 59. A map would future management plans for Tansy Beetle in 2026.



Conclusion
Tansy beetles continue to persist at WWT Welney, but only in low numbers and in one small area. Their survival is threatened by rank ground vegetation and dense shade from Willow trees, which requires regular management, to allow lower-growing food-plants species to persist. In addition, the winter flooding in recent years is becoming more sustained, deeper and could affect soil composition, vegetation structure and the ability of the Tansy beetle to overwinter.

A Natural England Species Recovery Project is funding a scheme to investigate the differences between the York and Cambridgeshire Fen Tansy beetle populations, how the beetles cope with flooding during hibernation and food preferences. It is hoped that results from this study may provide crucial information on managing the habitat for Tansy beetles at WWT Welney.

Acknowledgements

The River Ouse survey would not have been possible without the enthusiasm, time and effort of the following volunteers, Alwyn Craven, Andrew Vevers, Anne Carter, Miranda Dunston, Barry Graham, Ben Coulson, David Moss, Eva Freegard, James Wildash, Jonathan Day, Juliet Koprowska, Meg Stark, Sean Gregory-Ling, Neil McIlveen, Nicola Ward, Steve Ward, Peter Mayhew, Phil Robinson, Rachel Midgley, Ray Haddock, Richard Baker, Jo Baker, Richard Wilson, Thilo Winzer, Thomas Hook, Hannah Black and Tony Fairburn, In addition, thanks must also be given to Geoff Oxford for his assistance in developing the University of York St John Tansy beetle arc site and monitoring the Tansy beetle introductions there.

Thanks also to Sarah King and Steve Williams (Yorkshire Museum Gardens), Lauren Lane, Luke Durston (Askham Bryan College), Sarah Williams (University of York St. John), Ben Coulson (Bugtopia Hornsea Zoo), and Zoe Starling (The Zoological Society of East Anglia) for providing information on their respective ark/educational populations. Likewise, June Whittaker and Rosie Robinson-Pethullis provided information about their phenology studies at Bishopthorpe and Beningbrough Hall, respectively. Finally, I am hugely grateful for Vicky Wilkins arranging insurance cover for the Ouse surveyors *via* the Species Recovery Trust.

For the Fenland sites, Julian Hodgson, Katy Smith, Juliana Griffiths, Holly Barker and Jacob Daniels provided valuable information on the beetle population at Woodwalton Fen NNR. At Welney Fen, thanks go to the Monday volunteers (Val Simons, David Cree, Ron Bickerton, Mark Pierson, Paula Carrott, Louise Hall and Harry Palmer) for helping Samantha Instone with habitat management along the Tansy Trail. In a similar vein, help was provided by Annette Littler, Sarah Wolton, Megan James, John Marrow, Rozanne Marrow, Jack Walton, Georgette Taylor and Richard Wicks with the Tansy beetle surveys at Welney Fen. Finally, thanks also go to Lizzie Bruce and Lily Abbiss for proofreading the Welney Tansy Beetle Report.

Thanks to Geoff Oxford and Richard Baker, who proofread the TBAG report. Thanks also to Nathan Friel for compiling the river Ouse riverbank habitat management maps and Vicky Wilkins for co-ordinating the Tansy beetle surveyors, allocating the GPS handsets and providing important information on her riverbank habitat management plans for Tansy plants and beetles along the river Ouse. Finally, thanks must also go to the Environment Agency for providing the 2025 river level data for the river Ouse.

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