

Fish Quay Management Plan (2017-2022)



Fish Quay Management Plan

Introduction

The Fish Quay banksides are located along the mouth of the Tyne Estuary at North Shields. The area extends along Tyne Street from the registry office and the Union Stairs apartments through to the banksides by the Wooden Doll Public House near Brewhouse Bank. (A site location plan can be found in Appendix 1). This area is designated greenspace and forms part of an important wildlife corridor along the River Tyne.

The banksides are within the Fish Quay Conservation Area. It forms an important backdrop to the groups of buildings running along Bell Street and Union Quay. The banksides also provide a relatively uninterrupted and elevated platform for strategic panoramic views of the Tyne. Conservation areas are about character and appearance, which can derive from many factors including individual buildings, building groups and their relationship with open spaces, architectural detailing, materials, views, colours, landscaping, street furniture and so on. Character can also draw on more abstract notions such as sounds, local environmental conditions and historical changes. The open spaces and the buildings combine to create a locally distinctive sense of place worthy of protection. The Council are also under a corporate duty to have regard to preserving or enhancing the character and appearance of conservation areas in undertaking their duties.

Landscaping along the bank sides includes a mixture of woodland and scrub habitat, semi-improved neutral grassland, amenity grassland and ornamental planting. This mature planting is important for wildlife, in particular birds and invertebrates as foraging, nesting and feeding habitat. The Newcastle & North Tyneside Biodiversity Action Plan (BAP), a strategy which aims to protect and enhance important habitats and species in North Tyneside, includes habitats which are found along the Fish Quay, such as woodland and scrub habitat. Appropriate maintenance and enhancement of these habitats will, therefore, help to deliver targets within this strategy. In addition, the Council also has a statutory duty under the Natural Environment & Rural Communities (NERC) Act (2006) for conserving biodiversity in the exercising of its functions. This includes the management and maintenance of all natural habitats, therefore, this area will be maintained for wildlife as well as visual amenity and strategic views.

Management Objectives

The following measures will be implemented along the Fish Quay area in order to maximise the sites biodiversity and conservation value as well as its aesthetic value and for this to be maintained in the long-term. All management actions will be undertaken by Local Environmental Services Team Leader staff (unless specified

otherwise) and will be subject to weather conditions. The local community is also encouraged to get involved and work in partnership with the Council in the management of this area. Plans showing the extent of each habitat compartment can be found in each section.

General Management Aims:

- To preserve and enhance the area's wildlife and conservation value.
- To provide a well managed site containing a diverse range of habitats that can be enjoyed by the public.
- To retain and enhance strategic views across the River Tyne, which make a significant contribution to the character and appearance of the conservation area.

The habitat map shown in Appendix 3 illustrates the various habitat compartments along the site. General management of these various habitat 'types' are set out below:-

Woodland & Scrub Habitat

Woodland habitat provides good roosting, feeding and nesting habitat for a variety of birds as well as potential foraging habitat for other species. It also helps form a continuous corridor of planting along the banks of the River Tyne. Trees should be selectively thinned in these areas to improve the health of the woodland and its biodiversity value as well as to retain some strategic views in specific locations. Ground flora can be improved in these areas by planting native bulbs and woodland wildflowers. General aims intend to:-

- Retain existing woodland and scrub areas wherever possible. Mature
 woodland plantations can take a long time to develop and many plant and
 animal species associated with woodlands are not very mobile and do not
 colonise new sites easily.
- Maintain or enhance a multi-layered woodland structure. Deciduous woods have four distinct vertical layers: ground, field, shrub, and canopy. Some plant and animal species complete their entire life cycles in a single layer while others require four healthy layers to find food and shelter and to reproduce. Aim for a diversity of native tree and shrub species. This ensures that the food cover and breeding habitat requirements are met for the widest possible range of species, both seasonally and over entire life cycles.
- Maintain planting corridors that connect different habitats together, allowing wildlife movement and maximising plant and animal populations.

Thinning will act as the means for the gentle removal of unwanted species over a planned period and should ideally take place over 5 to 10 year cycles, depending on available resources, and development of stand structure. Thinning will aim to retain a minimum of 60% of the canopy but will also avoid even spacing so as to begin the process of transformation to a more uneven-aged structure through gap creation for the purposes of regeneration. Control of the seed-bed will be critical in achieving

successful regeneration as bramble and other aggressive weeds are likely to dominate if light levels are too high. Re-stocking via natural regeneration and underplanting will be favoured, encouraging tree species such as oak, ash, silver birch and rowan and shrub species such as hazel, dog rose, blackthorn, hawthorn, crab apple and goat/grey willow.

Scrub habitat is extremely valuable for wildlife, providing good nesting habitat and a source of winter food for many bird species such as dunnock, wren, house sparrow and blackbird. Scrub invasion, however, can be a problem in areas where there is existing valuable habitat such as species rich grassland and in these instances, scrub control is recommended. This can be undertaken on a rotational cycle i.e 1/15th of the scrub areas are pruned back every year and 1/6th of bramble areas are cleared every year, to ensure that this vegetation does not take over. In addition, any scrub areas that overhang pathways or stairs should also be regularly pruned back. All tree or scrub works should be carried out over the winter avoiding the bird nesting season (March-August inclusive.

Five Year Action Plan: Woodland/Scrub Habitat

Project/Objective	Year 1	Year 2	Year 3	Year 4	Year 5
Selectively thin out trees in woodland areas to maintain the health of the species and maintain strategic views		/		-	/
Selectively remove or prune back any scrub encroaching into valuable grassland areas		/			/
Rotational cutting of scrub/bramble to maintain its wildlife value and prevent encroachment into other areas. Coppice scrub by 1/15 th every year and bramble by 1/6 th every year in winter. This provides a mosaic of scrub and bramble at different stages of growth.(Community Project)	/	/	/	1	/
Leave deadwood on site, where practicable, as habitat for wildlife or shred any wood back into woodland areas	/	/	/	/	/
Manage berry bearing native and ornamental shrubs for wildlife by pruning in late winter (Jan/Feb)	1	1	/	1	/
Hard prune shrubs to one metre of steps/pavement edges over winter period.(October-March)	1	/	/	1	/
Trim back ivy where it is encroaching onto stairs and paths and encourage growth inwards.	/	/	/	/	/
Remove litter within woodland/scrub areas (where accessible) twice a year. (This could be increased by community	1	1	/	1	/

involvement through (Environmental					
Campaigns)					
Plant native bulbs (bluebells/wild					
garlic/wood anemone) within woodland		,	,	,	
areas to create colour and diversity in		,	,	,	
October (Community Project)					
Sow woodland wildflower seed on the					
bare banks of the woodland areas in		/	/	/	
spring/autumn. (Community Project)					
Introduce low growing native shrubs into					
selected sections of the woodland copse to			,		
improve understorey planting between			,	,	
October-March. (Community Project)					
Herbicide treatment of Japanese knotweed	,	,	,	,	,
by contractor in summer where required.	/	/	/	/	/

Semi-Improved Grassland

The majority of the grassland areas along the fish quay bank sides consist of species poor semi-improved grassland with some areas of higher nutrient enrichment where invasive plants such as nettles, thistles, hogweed and bramble dominate. The fish quay sculpture is the exception, where a more species rich semi-improved grassland exists consisting of plants such as black knapweed, bird's foot trefoil, common catsear, tufted yetch and red clover.

Semi-improved grasslands are classified as such on the basis that they have received some nutrient enrichment (i.e artificial fertilisers, intensive grazing, herbicides etc) in the past, as opposed to unimproved grasslands that generally have had little or no nutrient inputs and have a higher plant species diversity. Soil type is also important in terms of floristic composition and neutral grasslands are those occurring on neutral soil with a pH of around 5.5-7.0. Certain plants are indicative of neutral conditions and include species such as meadow foxtail, bird's-foot trefoil, ox-eye daisy, red clover, meadow vetchling, common sorrel, timothy grass and red fescue. The abundance and diversity of these species indicates the degree to which the grassland has been enriched or improved with nutrients.

Generally, wildflower meadows or conservation grasslands are cut infrequently (generally once or twice a year) to allow all species in the sward to flower and set seed over the spring/summer period. Grass arisings would then be collected and taken off site (rather than being left on the ground) to prevent nutrients in the grass cuttings being recycled into the soil.

Management of the grass banks should ideally be undertaken in accordance with the above techniques in order to deplete the banksides of nutrients which will help reduce the dominance of species such as nettles, thistles, docks and hogweed. However, removal of grass cuttings is extremely labour intensive and usually not undertaken for this reason. The exception is where community groups, such as those at Brierdene, get involved and do this themselves. Whilst the grass banksides will be cut twice a year (early March and September) the removal of arisings to improve the banks may require the involvement of the local community. The grassland could also be

improved by introducing wildflower seed and plug plants in some sections to increase species diversity and improve aesthetic value. Spring and autumn are the best times of year to undertake this.

Five Year Action Plan: Semi-Improved Grassland

Project/Objective	Year 1	Year 2	Year 3	Year 4	Year 5
Cut grass banks twice a year (March & September) Removal of arisings could be a community project (Environmental Campaigns)	/	/	/	/	/
Remove litter within grassland areas (where accessible) twice a year. (This could be increased by community involvement through (Environmental Campaigns)	/ / / /		/	/	
Introduce yellow rattle seed into selected grassland areas to reduce dominant grasses and increase species diversity in autumn. (Community Project)		/		/	
Introduce wildflower seed/plug plants into selected grassland areas to increase species diversity in spring/autumn. (Community Project)		/			/
Leave a 1 metre uncut grass edge adjacent to woodland and scrub areas as a buffer zone	1	/	/	/	/

Amenity grassland

Amenity grassland is also known as improved grassland (i.e has a high nutrient input) and is a species poor grassland, which has either been seeded or intensively managed to produce grassland suitable for amenity use. Areas adjacent to footpaths are often regularly cut to maintain a 'tidy' look and to prevent vegetation creeping onto footpaths and generally require regular maintenance. There are amenity grass strips running along Tyne Street and along the edges of the stairs which should be cut regularly throughout the maintenance season to keep these areas tidy and grass from growing over onto public footpaths.

Five Year Action Plan: Amenity Grassland

Project/Objective	Year 1	Year 2	Year 3	Year 4	Year 5
Cut a 1-2 metre wide strip adjacent to the path edge along Tyne Street throughout the spring/summer period (14 cuts)	/	/	/	/	/
Spray weeds on paths and steps using an appropriate herbicide. Up to 3 applications	/	/	/	/	/

to be undertaken by contractor in March, June & September.					
Remove litter next to paths/stairs over spring/summer period.	/	/	/	/	1

Ornamental planting

Ornamental plants are generally plants that are grown for decorative purposes in gardens and landscape design projects. There are some large areas of ornamental planting along the eastern end of Tyne Street and around the top of the stairs along the western end near the Registry Office. These areas provide amenity planting of aesthetic value as well as wildlife value. These areas should be selectively pruned to maintain a 'tidy' edge along footpaths and stairs and to prevent overgrown vegetation creating access issues. Pruning should ideally be undertaken over autumn/winter (October-March), avoiding the pruning of berry bearing shrubs (e.g cotoneaster, berberis, snowberry etc) until late winter (January/February) after all the berries have been eaten but before birds start nesting

Five Year Action Plan: Ornamental Planting

Project/Objective	Year 1	Year 2	Year 3	Year 4	Year 5
Hard prune shrubs to 1 metre from edge of pathways and stairs to prevent overhanging vegetation along access routes. (Outside bird nesting season)	ecess /		/	/	/
Prune ornamental shrubs where required over autumn/winter period (October-March)	/	/	/	1	/
Remove litter within ornamental planting areas twice a year where accessible. (This could be increased by community involvement through (Environmental Campaigns)	/	1	/	/	/
Cut back Ivy along edges of paths and stairs	/	/	/	/	/

Invasive Species

There is a small stand of Japanese Knotweed along the banksides of the fish quay which will spread if left untreated. Japanese Knotweed is a non-native invasive plant which becomes dominant very quickly at the expense of other native plant species, reducing biodiversity. The plant is listed on Schedule 9 of the Wildlife & Countryside Act (1981) and it is an offence to knowingly spread this plant.

As a consequence of Japanese knotweed being recorded across North Tyneside, the Council now has a spraying regime in place whereby locations of this plant are sprayed with a herbicide treatment at an appropriate time of year (summer) for at least 3 years or until there is no further evidence of re-growth.

The stand of Japanese knotweed along the fish quay banks, will therefore, be sprayed once annually over summer (around August) until no signs of re-growth can be seen.

Five Year Action Plan: Invasive Species

Project/Objective	Year 1	Year 2	Year 3	Year 4	Year 5
Contractor to treat all areas contaminated with Japanese Knotweed with appropriate herbicide (summer period)	/	/	/	1	/
Monitor areas of Japanese Knotweed for any re-growth to ensure success of treatment programme (spring/summer)	/	/	/	/	/
Add any new areas of Japanese knotweed to current list and treatment programme.	/	/	/	/	/

Site Management

The Fish Quay area has been split up into compartments based on diversity of habitat and management aims. There are six 'compartments' listed below which run the length of Tyne Street. Tanners Bank and Knotts Flats Banksides will be added as a separate management document.

1)Union Stairs

This area consists of a mixture of native trees and shrubs as well as ornamental shrub planting. The western section is mainly wooded with native species and an unusual predominance of fruit trees many of which are fruiting well. Species include norway maple, sycamore, silver birch, alder, willow and elder as well as fruit trees that include plum, damson, pear and apple. At the top of the stairs close to Tyne Street, there are some ornamental shrubs consisting of evergreen species such as cotoneaster, laurel, senecio and eunonymus. The section to the far west in front of the Union Stairs residential accommodation, consists of a small section of overgrown ruderal plants and some low growing ornamental shrub plants.

Figure 1: Union Stairs Habitat Map



Key objective:

To improve the amenity and aesthetic value whilst protecting and enhancing the biodiversity of the site. The maintenance of a varied canopy height and diversity of species in the woodland area is important to maximise the habitat for a range of wildlife. The management plan will look to secure this diversification whilst being mindful of the strategic views

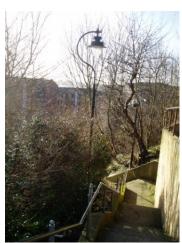
- Removal of rubbish twice a year focusing effort on the area around the stairs that run from Tyne Street down to Bell Street and on the woodland bank (where accessible and safe).
- Selective thinning of trees every 3-5 years (where accessible) to allow the woodland to flourish. In order to facilitate a strategic view from Northumberland Square across the Tyne, careful selection of trees for pruning (crown reduction) or removal should be undertaken. All works should be undertaken outside of the bird nesting season (March-August inclusive)
- Hard prune shrubs to one metre of step/pavement edge over winter period.(No works to be undertaken in bird nesting season)
- Prune ornamental vegetation at the top of the stairs adjacent to Tyne Street (between October-March to avoid bird nesting season)
- Trim ivy only where necessary and encourage growth inwards. Ivy is beneficial to biodiversity and it is also a compact easily maintained species.
- Create a 1-2 metre grass edge at the top of the banksides along Tyne Street (keep this maintained regularly (14 cuts) over summer to ensure a neat and tidy effect close to the path). Minimal maintenance over winter period. Keep free from litter.
- Strim overgrown grassland area close to the stairs in front of the Union Stairs apartments – (2 cuts per year in March & September)
- Prune back ornamental shrubs in front of Union Stairs apartments outside of the bird besting season



Woodland Area- Union Stairs



Woodland Area- Union Stairs



View from Stairs

- Sow a woodland wildflower mix in sections of the woodland bankside to create a woodland groundflora and improve biodiversity –community project.
- Plant woodland bulbs (e.g bluebell, wild garlic, snowdrop) on woodland bankside to improve diversity and aesthetic value –community project.
- Create an understory in some sections of the woodland by planting native scrub (e.g hawthorn, blackthorn, hazel, dog rose etc) to create a varied tree structure –community project.



Ornamental Planting

2) Tyne Street

The western part of this area consists of a small copse of mixed native tree and shrub species including oak, sycamore, Norway maple, hawthorn and blackthorn. To the east there is an area of more open grassland interspersed with shrubs such as hawthorn and bramble. Parts of the grassland which are more nutrient rich contain a limited number of wildflowers including hogweed, dandelion, cow parsley, cleavers and bramble. On the steeper part of the slope, the grassland contains species indicative of a more diverse grassland with plants such as red clover, self heal, black knapweed, tufted vetch and birds foot trefoil. The grass verge at the top of the bank adjacent to the path is regularly maintained as amenity grassland.



Figure 2: Tyne Street Habitat Plan

Key Objective: To maintain and enhance habitats for biodiversity, enhance visual amenity and retain strategic views.

- Cut a 1-2 metre grass verge strip adjacent to the pavement at the top of Tyne Street and around any seating. (14 cuts per year throughout the spring/summer maintenance period). Keep free from litter.
- Remove litter within woodland/scrub and grassland areas twice a year.
- Manage grass area as a meadow with two annual cuts in March and September. Removal of arisings could be undertaken as part of a community project.
- Sow nutrient rich areas of the grassland banks with yellow rattle seed to help reduce vigorous grasses in the sward.(Community project)
- Enhance the biodiversity of the grassland area by introducing wildflower seed in selected areas in autumn/spring and wildflower plug plants in early spring. (Community project)
- Selective thinning of woodland/scrub copse every 3-5 years to allow the development of the remaining trees and to maintain the health of the trees. All material should either be shredded on site or taken away and all works should be undertaken outside of the bird nesting season (March-August inclusive).
- A 1m wide uncut grass strip should be retained adjacent to the woodland copse area to provide a wildlife buffer strip.
- Fruit and berries are an important food resource for many birds and mammals in the autumn and winter. Native shrubs such as hawthorn, blackthorn, holly and guelder rose are great berry producers and so are some ornamental plants e.g cotoneaster. Works to berry bearing shrubs and hedgeing should, therefore, aim to be undertaken in late winter (February) after all the berries have been eaten but before birds start nesting.
- No trees/scrub should be pruned/removed in the bird nesting season (March-August inclusive)





Above: Banksides from Bell Street





Above: Banksides from Tyne Street

- Prevent the spread of scrub such as hawthorn/bramble etc into the open grassland areas by rotational coppicing of 1/15th of the scrub and 1/6th of the bramble on an annual basis. Any scrub growing in inappropriate areas should be removed (Community project).
- Strategic views should be maintained or created from Norfolk Street and above the Bilton Buildings (Figure 2). This will involve selective removal/pruning of trees in agreement with appropriate parties.
- Planting of a native under-storey within the woodland copse as part of a community project. This will increase biodiversity of the site and help discourage antisocial behaviour. Species should consist of lower growing shrubs and a woodland wildflower mix as shown below:-



Areas of overgrown scrub



Palisade fencing behind Bilton Building

Scrub Mix	Woodland Wildflower Mix
Holly	Upright hedge parsley
Hawthorn	Slender Creeping Red Fescue
Blackthorn	Ramsons
Hazel	Foxglove
Gorse	Bluebell
Guelder Rose	Herb Robert
Dog Rose	Perforate St. Johns Wort
Common Dogwood	Selfheal
	Red Campion
	Greater Stitchwort
	Wood Sage
	Wood Avens
	Hedge Woundwort
	Crested Dogstail
	Tall Fescue

3) Highlights Copse

This area consists of a large area of dense native scrub and trees including species such as oak, sycamore, ash, silver birch, rowan, poplar, willow, hawthorn, blackthorn, rosa, elder and bramble. This area provides very good habitat for a range of wildlife but most importantly as nesting and feeding habitat for a range of birds. A stand of Japanese Knotweed is also present in this section and has been treated as part of a Council eradication and control programme.

There is also a small area of semi-improved grassland in the western section of this area towards the top of the bank which could be improved by appropriate management and introduction of wildflowers to attract insects as part of a community project.



Figure 3: Highlights Copse Habitat Plan

Key objective: To maintain and enhance habitats for biodiversity, enhance visual amenity and retain strategic views.

- Treat stands of Japanese Knotweed on an annual basis (August) and monitor for re-growth annually in spring/summer. Any new stands of knotweed should be included within the Councils knotweed programme and treated appropriately on site.
- Cut any overhanging branches adjacent to stairs to keep area clear for access.
- Cut a 1-2m grass verge strip adjacent to the pavement at the top of Tyne Street and around any seating. 14 cuts per year throughout the spring/summer maintenance period. Keep free from litter.
- Remove litter within woodland/scrub and grassland areas twice a year (where accessible and safe).
- Manage grass bank area as a meadow with two annual cuts in March and September. Leave a 1m wide grass verge adjacent to the edges of the woodland/scrub copse to provide an 'edge' habitat and prevent strimmer damage to trees. (Removal of arisings could be undertaken as part of a community project).
- Enhance the biodiversity of the grassland area by introducing wildflower seed or plug plants in selected areas in autumn/spring –community project.
- Selective thinning of woodland/scrub copse every 3-5 years to allow the appropriate development of the remaining trees and maintain strategic views from Dockwray Square. All material should either be shredded on site or taken away and all works should be undertaken outside of the bird nesting season (March-August inclusive).
- Fruit and berries are an important food resource for many birds and mammals in the autumn and winter. Native shrubs such as hawthorn, blackthorn, holly and guelder rose are great berry producers. Works to berry bearing shrubs and hedging should, therefore, aim to be undertaken in late winter (February) after all the berries have been eaten but before birds start nesting.
- Prevent the spread of scrub/shrubs such as hawthorn/bramble etc into the open grassland areas by selective pruning/removal every 3 years (community project)





Above: Eastern Woodland



Above: Western Banksides



Areas of dead scrub (elder)



Steps near Bilton Building

4) Fish Sculpture Area

This area includes the fish sculpture (area 4a) where attempts have been made in the past to introduce a species rich grassland in amongst various sections of the sculpture. The wildflower species diversity is greater here than in other areas along the fish quay, however, it does require appropriate management and further enhancement as sections are being encroached by invasive plants. Key wildflower species in this area indicate a semi-improved neutral grassland and include:- ox-eye daisy, bird's foot trefoil, yellow wort, ribwort plantain, black knapweed, common catsear and red clover.

This area also contains native and ornamental trees and shrubs to the south and east of the fish sculpture (areas 4b and 4c) which includes species such as rosa, bramble, dogwood, ivy and ornamental species.



Figure 4: Area 4 Habitat Plan

Key objective:

To create an attractive and diverse wildflower meadow area by undertaking appropriate management and enhancing the area with additional planting. To manage native and ornamental shrubs for wildlife and to improve visual amenity value.

- Prune back ornamental and native shrubs next to pathways/stairs to prevent access issues. Ensure works are undertaken outside of the bird nesting season (March-August inclusive)
- Spray weeds on paths and steps using an appropriate herbicide in the growing season (spring/summer). Do not spray in windy conditions to avoid drift.
- Cut back ivy where it is encroaching onto steps and paths and remove material from site.
- Cut a 1-2m grass verge strip adjacent to the pavement at the top of Tyne Street and around any seating. 14 cuts per year throughout the spring/summer maintenance period. Keep free from litter.
- Remove litter within tree, scrub and grassland areas twice a year.
- Manage wildflower areas within the fish sculpture by strimming twice a year in March and September and removing arisings to reduce nutrient input and weed growth. (Community project)
- Enhance the wildflower areas of the fish sculpture by introducing wildflower seed and/or plug plants in autumn/spring – potential community project.
- Selective management of woodland and scrub habitat in areas 4b and 4c to maintain the health of the trees (every 3-5 years). All works should be undertaken outside of the bird nesting season (March-August inclusive).
- Fruit and berries are an important food resource for many birds and mammals in the autumn and winter. Native shrubs such as hawthorn, blackthorn, holly and guelder rose are great berry producers. Works to berry bearing shrubs and hedging should, therefore, aim to be undertaken in late winter (February) after all the berries have been eaten but before birds start nesting.





Above: Fish Sculpture



Steps to ornamental planting areas

5) High Beacon Stairs

This section contains a well established and dense area of ornamental/amenity planting consisting of the following species:-

- Cotoneaster horizontalis
- Cotoneaster skogholm
- Cotoneaster salicifolus
- Senecio greyii
- Symphoricarpus (snowberry)
- Rosa rugosa
- Hypericum
- Buddleia davidii
- Ivy
- Elder
- Malus Sylvestris
- Sycamore
- Bramble
- Eunonymus

This area, although mainly ornamental and containing species which are non-native, provides valuable shelter, feeding and nesting sites for a range of birds such as blackbird, dunnock and robin and insects such as butterflies and bees. The area forms part of a wildlife corridor along the banks of the River Tyne, allowing many species to move freely along these interconnecting habitats. There is also a small area of trees and scrub to the south east of the Wooden Doll Public House which will require maintenance.

Figure 5: High Beacon Stairs Habitat Plan



Key objective: Manage the area to improve visual amenity value as well as biodiversity value for wildlife.

- Hard prune shrubs to 1 metre from edge of pathways and stairs to prevent overhanging vegetation along access routes. Works should be undertaken over autumn/winter (October-February) period to prevent harm to nesting birds. (Fruit and berries are an important food resource for many birds and mammals in the autumn and winter. Works to berry bearing shrubs and hedging should, therefore, aim to be undertaken in late winter (February) after all the berries have been eaten but before birds start nesting)
- Remove litter within the ornamental shrub areas twice a year, focusing on the areas adjacent to footpaths particularly along Tyne Street.
- Spray weeds on paths and steps using an appropriate herbicide in the growing season (spring/summer). Do not spray in windy conditions to avoid drift.
- Cut back ivy where it is encroaching onto steps and paths and remove material from site.
- Selectively thin/remove trees to south-east of the Wooden Doll Public House adjacent to the stairs, to maintain views and improve the health of the trees. (Outside of the bird breeding season, March-August)





Ornamental planting along Tyne Street



Metal railings & ornamental planting



Stairs down to Bell Street

6) Brewhouse Bank

This section contains poor semi-improved neutral grassland along the top bank of Tyne Street and along the steep bankside adjacent to Brewhouse Bank. The grassland contains a poor diversity of wildflowers including ribwort plantain, yorkshire fog, cow parsley, large dock, meadow buttercup, tufted vetch, false oat grass, red and white clover, hogweed and common sorrel. The grassland is intersected by an area of scrub habitat along the central section that includes species such as sea buckthorn, sycamore, hawthorn and willow.



Figure 6: Brewhouse Bank Habitat Plan

Key objective:

To create an attractive and diverse wildflower meadow area by undertaking appropriate management and to manage shrubs for wildlife and visual amenity value.

- Manage grass bank area as a meadow with two annual cuts in March and September. Arisings could be removed as part of a community project.
- Enhance the biodiversity of the grassland area by introducing wildflower seed or plug plants in selected areas in autumn/spring – community project.
- Remove litter on bankside area twice a year (March & September)
- Prune back shrubs to prevent encroachment into grassland area in autumn/winter to avoid bird nesting season.

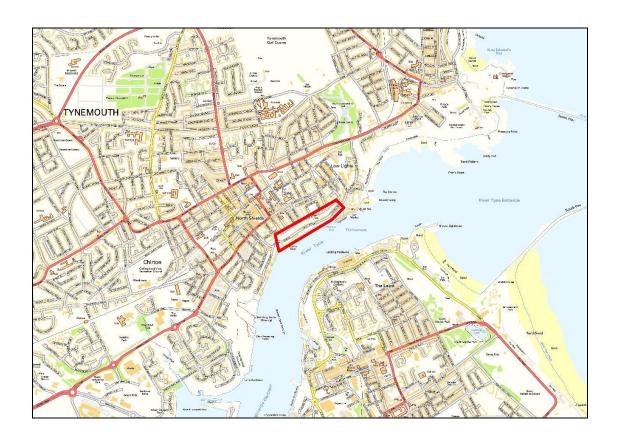


Brewhouse Bank

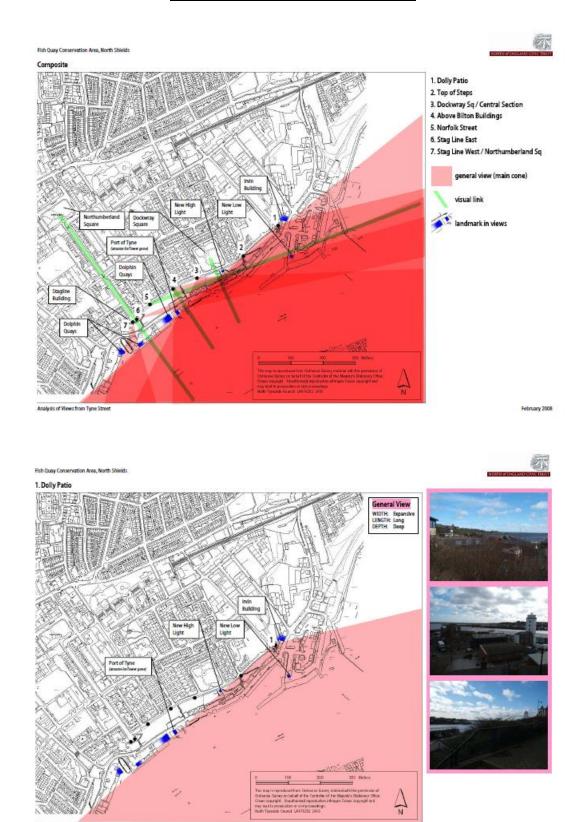


Bilton Building

APPENDIX 1: Location Plan

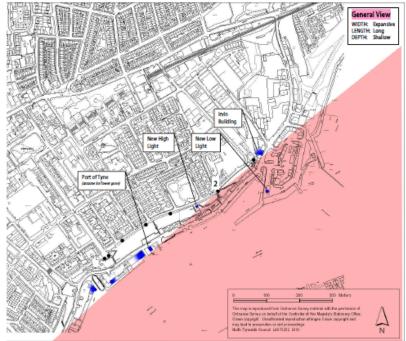


APPENDIX 2: Strategic Views



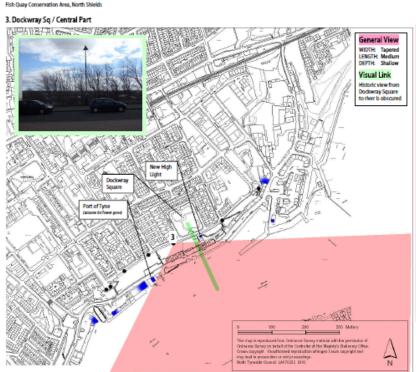


2. Top Of Steps





Fish Quay Conservation Area, North Shields





Analysis of Views from Tyne Street

APPENDIX 3: Habitat Map

