Three Towns Growers
Allotments and Community Garden

Biodiversity Action Plan

Biodiversity is the variety of plants and animals found in an area. A high level of biodiversity benefits people. Three Towns Growers aims to enhance the biodiversity of the site by undertaking the following actions:

We are creating a Wildlife Pond

A pond is one of the most useful habitats for wildlife in gardens and allotments. Frogs help control slug problems.

We are currently excavating a wildlife pond (14m x 8m) to be completed by October 2017.

The pond will have a number of features to benefit wildlife:
- The pond will be in a sunny location away from trees.
- It will have a range of water depths to at least 60cm
- Half the pond's surface will be planted & shaded by aquatic plants
- We will not introduce fish as they will eat beneficial wildlife
- We will take care not to introduce invasive pond plants or diseases

Apple tree grown on plot #13

We are planting a Community Orchard

Orchards are superb wildlife habitats providing food and shelter for a wide range of creatures, particularly birds, and provide nectar for pollinators.

So far 11 Scottish apple tree varieties have been planted.

Another 9 apple trees of the varieties - Greensleeves, Red Falstaff, and James Grieve - will be planted by schoolchildren later this year as part of National Tree Week, 25th November to 3rd December 2017.

We have chosen 'standard' sized trees (M25 or MM106 rootstock) rather than dwarfing rootstock as these yield high crops that support more wildlife

We have installed Bird and Bat Boxes

Many birds and bats are beneficial to allotments eating a variety of insect pests.

Bats can eat thousands of insects each night including mosquitoes and midges.

Surveys using bat detectors have shown that the mature woodland bordering the site is an important feeding site for common pipistrelles.

Two bird boxes have already been erected on site. These will be observed to see if they are being used and repositioned if they are not.

In December three bat boxes made of untreated timber will be erected on two of the largest trees growing on site.

A bug hotel under a raised bed shaped as a truck on plot #22

One of several bird boxes erected on site

We will encourage friendly insects by creating beetle banks and log and stone piles

Ground beetles are even more effective predators of slugs. Broad grassy strips make excellent refuges and breeding sites for predatory beetles.

We will set aside some ground and allow it to develop a thick a thick covering of matted grass.

We will create a multitude of habitats for beneficial animals.

Bug hotels will be created to make habitat for beneficial bugs.

Larger stone and log piles will be created to shelter slug-eating frogs, toads, slow-worms and hedgehogs.

We are planting pollinator borders

We have planted 11 native apple trees as cordons around the community garden that will benefit insect pollinators. We are planting another 9 apple trees in November as part of a larger community orchard.

Site borders will be planted with perennial pollinator plants such as buddleia and a living fence created with ivy and honeysuckle. Ivy's dense growth is a refuge for insects and small birds, and its nectar and berries are a valuable food source for wildlife.

In the wildlife area we will grow key insect foraging plants - comfrey, clovers, aromatic herbs (coriander, catnip, mint, parsley, lavender), annuals (marigold, phlox, bachelor's button, zinnia, cosmos, salvia), and perennials (bee balm, iris, coneflower, lobelia, delphinium).

We will sow the wildlife meadow in spring or autumn and mow the meadow once only between mid-August & mid-September

Woodland within site

Woodland within site

We have set aside areas for wildlife management

Part of the site has been demarcated for biodiversity and will be managed.

Bramble is an excellent food source and refuge for wildlife but must be managed.

We will cut different sections back on a three- or four-year rotation so there is always a gradation between first-year growth and mature stems to benefit wildlife.

Bramble will be cut before the start of the nesting season as it is illegal to disturb nesting birds

We will not cut grass in 1m wide strip around wildlife area to create thick covering of a matted grass border for predatory beetles/beneficial insects.

Wildflower area of site set aside for pollinator insects

Promoting members cultivation of heritage varieties, rare native plants, pollinator plants, and Scottish fruit trees

Damson 'Merryweather'- a 'wild type' plum grown on plot #6

A beautiful and diverse wildflower area on plot #10

Flowers from a rare heritage marrow grown by plot holder

Educational Activities – we hold workshops and talks on native plants and animals (below photos: John Keachie)

Anne Youngman, Scottish Officer of the Bat Conservation Trust, talks about UK bats
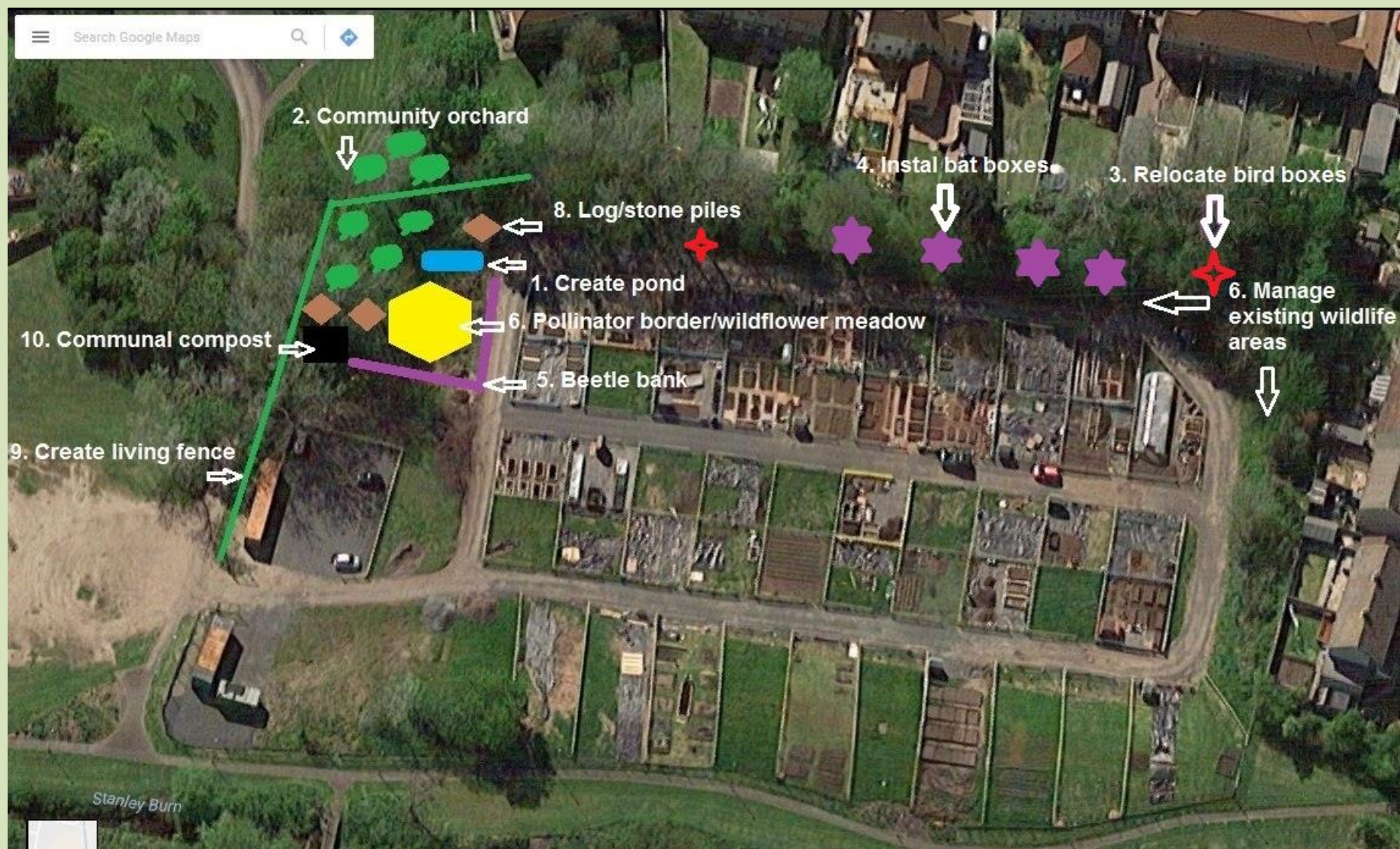

The local community and plot holders keen to attend talk about Scottish wildlife

Younger members learn how to use bat detectors to locate and identify bats

Biodiversity Conservation Activities at Three Town Growers Allotments and Community Gardens

"Three Towns growers is a charitable body, registered in Scotland, charity number SC047569"

Table - Biodiversity Action Plan for Site

	What's required	Where	When
1	Establish pond at least 6^{sq}m in size with variation in depth to at least 60cm. Plant native aquatic plants covering approx. half of pond. No fish as these will predate on beneficial animals. A Risk Assessment has been undertaken.	Sunny location in Wildlife Area – see figure 1	Pond dug by October, completed by April 2017
2	Plant 9 native apple trees (*Malus domesticus*), grown on semi-vigorous rootstock (MM106) to form basis of community orchard. Plant fruit trees a stopovers, cordons and espaliers around site to border community gardens.	Sunny location in Wildlife Area & border of community gardens– see figure 1.	To be planted by National Tree Week, 25th November to 3rd December 2017.
3	Check if existing bird boxes are being used and move/replace if not used. Consider alternative designs and larger owl box.	see figure 1	Observe bird occupancy. If not in use or incorrectly sited, reposition in December
4	Install 3 wooden Kent Bat Boxes made of untreated timber on suitable trees. Kent Bat Boxes to be made by community. Locate boxes on tree line at northern edge of site, ideally at least 4m above the ground (where safe installation is possible), and sheltered from strong winds and exposed to the sun for part of the day (usually S or SW	see figure 1	By December 2017
5	Do not cut grass in 1m wide strip around demarcated wildlife area to create thick covering of a matted grass border for predatory beetles/beneficial insects.	see figure 1	Ongoing
6	Cut sections of bramble on 3-4 year rotation cycle. Cut grass around planted seedlings to stop competition and promote tree growth.	see figure 1	Ongoing each year when birds are not nesting, ideally cut at end of January.
7	Demarcate area for growing pollinator plants and wildflowers. Plant wildflowers to include comfrey, clovers, aromatic herbs (coriander, catnip, mint, parsley, lavender), annuals (marigold, phlox, bachelor's button, zinnia, cosmos, salvia), and perennials (bee balm, iris, coneflower, lobelia, delphinium).	see figure 1	Best sown in spring or autumn. Mow meadow once only between mid-Aug. & mid-Sept.
8	Pile any dead trees to create log piles for hedgehogs making sure there are entry points at least 10cm wide to allow access. Encourage plot holders in install bug hotels in plots, create stone piles for insects.	see figure 1	Ongoing
9	Plant honeysuckle and native ivy (*Hedera helix*) along metal fencing bordering site to create an artificial hedge.	Fence line bordering access road - see figure 1	February - March
10	Demarcate and signpost area for communal compost heap.	see figure 1	ongoing