

**WATCHTREE NATURE RESERVE Ltd – Annual Report for
year 2011-2012 (1st April 2011 to 31st March 2012)**

WNR Ltd.

On behalf of the Directors of WNR LTD I am pleased to present my seventh annual report on the work and progress of Watchtree Nature Reserve Ltd.

We continue to make very good progress developing the Nature Reserve along the path originally set by the original habitat and species establishment plan. Watchtree nature reserve is developing a splendid diversity of species and habitats.

We are especially pleased with the progress in developing public access but recognise that access can still be improved. Watchtree Wheelers has been especially successful. The facility is much appreciated by the people who benefit. The Northern Rock Foundation Grant has been the key to this development enabling the 'Wheelers' Project Officer to devote the time required achieving our goals.

The key to our success is the blend of the combined efforts of Staff, Directors and Volunteers, whose unbounded enthusiasm makes it all work.

We continue to work with the Interserve site staff and appreciate their input when required.

Our key achievements during the year were:

Visitor numbers continue to rise with almost 6000 visits recorded.

A further increase in the number of school visits and children visiting.

The continued development of Watchtree Wheelers.

The implementation of the visitor information and interpretation plan.

Completion of the Marsh Fritillary Butterfly habitat development plan.

Working with Lancaster University.

Habitat and Estate Management

The habitat and estate management work mainly focussed on the small meadows and the project aiming to convert them to a grassland habitat for the Marsh Fritillary butterfly. All ten meadows have now been re-seeded and over 4,000 Devil's-bit Scabious plants planted. However, early indications are that this food plant of the butterfly does not like the soil conditions.

Vegetation monitoring in these fields seems to suggest that we have chosen a much better seed mix for the soil type. Monitoring will continue and time will tell. We changed the haymaking and sheep-grazing regime to a summer cattle-grazing regime.

The soil structure is the problem and during the summer two students from Lancaster University carried out short projects on the soils and the Devil's-bit Scabious. In brief their conclusions were that the heavy clay soil has no structure and water log's forming a hard surface pan. The plant does not like these conditions. Their dissertations are available on our web site.

We are working with Lancaster to develop a longer PhD project that can establish field trials and experiments to speed up a natural process that may take decades without help. Drainage and manuring are two options. We obtained Defra's consent for manure applications but obtaining well-rotted manure is difficult.

Experiments on the topsoiled runway to establish a wild flower meadow seem to be making the best progress judging by the species that are now showing well. To continue this enhancement we scarified and sowed another small plot with a suitable hay-meadow seed mix. Our volunteers also collect seed from some of the flowers that have successfully established and these are scattered in suitable locations.

The grazing and haymaking was again licensed to our three regular graziers. Despite a very wet summer they all managed to take some hay. Haymaking was not without problems especially on the 'Northern Cells' where the hollows between the cells were very wet. A small area was cut but the remainder abandoned because the tractor was unable to traverse the wet hollows without causing deep ruts. Following much discussion during the winter and in consultation with Defra, we sought the views of the local community about grazing the rough grass off with sheep. We received a favourable response and Defra gave their consent. Our grazier was also consulted and willing to put his sheep on. At the end of March the area was electric fenced and within a week the sheep had completed the job.

Given that most years we have some difficulty with the wetness of the hollows between the cells we decided to open discussions with Defra on a plan to put drains in each of these hollows. The discussions will continue into 2012.

The woodland areas seem to be developing at different speeds and, as with the grasslands, the trees are responding to a range of soil conditions. This is adding an interesting diversity to the woodland structure and we shall not intervene.

Woodland management work mostly coppicing the trees to maintain glades and rides for invertebrates and around the Pond Wood pond to keep plenty of light on the water.

The Elemental Garden is still under development but with the target to complete the work this coming summer. The work has been done by our volunteers and various grants and donations have provided materials. The topsoil donated by Birse Civils has provided a good hedge bank and filled some of the raised beds. The pond is our largest project and work commenced at the end of March when we received a grant from the Thursby, Caldbeck and Bowness Neighbourhood Forum to buy sleepers, the pond liner and path materials. A donation of sand for shaping the pond was received from Tarmac from their Cardew Mires quarry. The balance of a grant from Cumbria Community Foundation (received last year) went towards the purchase of a solar powered pump to circulate water between the two pools.

Marsh Fritillary Butterfly

We have three captive breeding cages as part of the Cumbria Marsh Fritillary Group breeding programme. We are supported by Steve Doyle of Butterfly Conservation who manages the programme and our breeding stock.

Public Access – Education – Watchtree Wheelers.

Much of our staff time and effort has gone into developing public access, education and Watchtree Wheelers.

We recorded 5901 visitors of which 1479 were children on school visits and 1,047 were using Watchtree Wheelers.

Our Nature Reserve Manager (Tim Lawrence) has been especially successful attracting schools to the extent that he feels further expansion would either result in having to cut back on other aspects of his work or to employ a part time education officer.

In addition to the school visits Tim runs evening sessions for local cub/beaver groups and children's activity days during the half term holidays, which are very popular.

He has good volunteer support for habitat and site management work every Wednesday (which started out as a morning session but several volunteers now stay into the afternoon) and the first

Saturday of the month. He achieved 4000 hours of volunteer help on a wide variety of work, almost double the figure of 2011.

The John Muir award scheme is promoted and run enthusiastically by Tim. As a result a number of volunteers from Garden Linx received awards for their input at Watchtree and a presentation was made by Jason Goodey, the Carlisle City Council Chief Executive.

Extending the cycle track is a large, ongoing project. Our volunteers have just about completed all they can do, the remainder requires contractors to lay tarmac and to provide a cycle training area. We shall be fund raising for this project during the coming year.

Watchtree Wheelers continues to flourish under our Wheelers Project officer (Ryan Dobson) whose post is funded by a three-year grant (which commenced in June 2011) from the NORTHERN ROCK FOUNDATION.

During the year Ryan became a trained 'bikeability' instructor and this has widened the scope of his work.

He too relies on a number of volunteers and we are indebted to them for the support they provide to the project.

The project attracts a lot of interest and the main users are groups including Chrysalis, James Rennie School, and a number of regular individual users.

The project has attracted grants from The Cumberland Building Society (£765) and several donations of bikes. We now have a diverse fleet for a wide range of disabilities.

The development of a tearoom in association with the local Church Trail and in particular with Aikton Parish Church was a significant achievement. Caro Fairbairn was the instigator and main driver of the project. We offered teas from July to September and will run the café again during 2012 summer.

The interpretation panels were completed and installed in July and add a nice dimension to the main room together with a single outdoor Sustainable Energy Panel funded by the Cumbria Community Foundation Grant. We commenced implementation of the next stage of the plan to provide guided trails and these will be installed during the coming year.

We attended a number of external events including Skelton, Cockermouth and Dalston Agricultural Shows.

Wheelers attended The Jennings River Ride, Wigton Carnival, Chrysalis Open Day, Wigton Youth Stations – 'Something for the summer' and The Independent Living Open Day.

Some of our Wheelers were nominated as Olympic Torch bearers as it passes through Cumbria and two were successful.

Publicity and PR

Publicity featured strongly in our drive to attract visitors and have a wide range of outlets. We contract 'Big Story' run by Karen Morley to do our press and media publicity. This is generally successful and we thank Karen for her efforts and interest in Watchtree.

Tim continues his monthly articles for two local parish magazines to keep the local people well informed.

We produced a new information leaflet and used a distribution company 'AHA' to circulate it. It has been very noticeable how many visitors come having picked up a leaflet at one of their outlets.

We have a very good web site and this links to Facebook and Twitter where we have a good following.

We still encounter people who will not visit Watchtree because of the bad memories it provokes and despite our efforts and reassurance some will never change their attitudes. We feel that we have managed to convert quite a few of the doubters especially after they have visited Watchtree.

Universities

Lancaster University was our key contact this year and two students completed studies. Their dissertations are available on our web site.

The University of East Anglia carried out a project on the Orange Tip and Green-veined White butterflies.

Students' course-work visits were made by Hadlow College, Kent and the University of Cumbria (Newton Rigg)

External Talks

We maintain a regular demand for talks and the principal speakers during this year were Tim, Ryan and William.

Membership Scheme

The principal benefits to members are the out-of-hours access and reduced rates for Watchtree Wheelers. At the end of the year we had 119 members (57 individual, 54 family, 8 group). Only a few Members are using the out of hour's access privilege. Several members take advantage of the Wheelers discount.

Directors.

We remain at 11 Directors who contribute in various ways, which adds to our local influence and credibility.

Wildlife

Watchtree

NATURE RESERVE

Wildlife monitoring of Birds, Butterflies, Moths, Dragon and Damselflies, Plants, Bats and Amphibians commenced in 2003 and is managed by 'Interserve' for Defra. The result is an enviable data set that we use to guide habitat management work. We are in negotiations with Defra to take on this work at some stage in the future. Brown Hares are monitored by Tim and he has a good record of this population. He also monitors small mammals.

Watchtree continues to develop as a splendid nature reserve and has a wide range of species. Monitoring shows some interesting changes. As the site develops Skylark numbers seem to have fallen but Willow Warblers and other woodland species continue to increase. Great Crested Newt numbers keep on rising but the frog population seems to have decreased at the expense of Common Toads. Brown Hares are our symbolic mammal, in the early morning it is not unusual see ten or more. However, we have not welcomed the presence of Grey Squirrels but sadly it has established in several nearby woodlands and Red Squirrels are rarely seen now. With such a good all round habitat it is not surprising that we have attracted a wide range of predators including Fox, Carrion Crow, Magpie, Stoat, Weasel, Kestrel, Buzzard. This is by no means an exhaustive list of predators of birds and small mammals and we do fear that some have disproportional impact on ground nesting birds. For example our Curlews tried several nest attempts and at least one nest, if not all, was taken by the Fox. It was captured on camera taking the Oystercatcher eggs.

Otters once again visited the site and were seen on two or three occasions including in front of the Lake Hide where it gave a good show for a visitor.

The results of ringing by Watchtree Bird Ringing Group show that the Willow Warbler is increasing (we colour ring this bird for easy identification of returning birds) as are other species of woodland bird

We feed the birds extensively at several locations where visitors can view them. The feeding resulted in the majority of our Tree Sparrows producing three broods and this was aided by the provision of a wild bird food crop next to 'The Wetlands' Given the conservation status of this species we are especially pleased by their breeding success at Watchtree. With the Skylark the Tree Sparrows are probably the two species visitors mention.

A rare plant for Cumbria, Yellow Bartsia was discovered growing on an area of broken-up runway by one of our regular volunteers

We produced a calendar, which again featured wildlife photographed on Watchtree and we are grateful for the photos taken by Directors, Staff and Visitors.

Forty-two new species or moths were recorded at Watchtree in 2011, taking the total to 289 species, including 30 UK / Cumbria Biodiversity Action Plan (BAP) species. Of the 15 species of moth classed as "Endangered" by the IUCN (*International Union for Conservation of Nature*), four have been recorded at Watchtree.

Several moth species whose larvae feed specifically on Aspen and poplar species have now been recorded at Watchtree since the introduction of these tree species in the new woodland plantings. These moth species, Seraphim, and Olive, first recorded in 2010 and Lead-coloured Drab, first recorded in 2011, are uncommon species in North Cumbria.

Dingy Skipper butterflies (a BAP species) continue to do well at Watchtree where careful habitat management is carried out to maintain and increase their habitat and larval food plant. The warm spring of 2011 produced an earlier than normal emergence, and the maximum count doubled from that of 2010. The other BAP species found at Watchtree, Wall, fared badly in the cool, wet summer of 2011, a decline probably initiated by the two previous cold winters. Hopefully this is a temporary situation and the population will recover quickly, provided conditions are suitable.

A recent addition to the Watchtree butterfly fauna is Small Skipper. First recorded in 2009, this species has dramatically increased in distribution and abundance in the last three years. This species is moving northwards, possibly because of climate change.

Dragonflies and damselflies continue to thrive at Watchtree where there is ample suitable habitat for them. One species which had undergone a large decline over the development of Watchtree was Black Darter, a species normally associated with more acidic, nutrient-poor waters. The recent creation of shallow pools seems to have allowed this species to recover and numbers were on the increase in 2011. As with some butterfly species, several odonata species are also moving northwards to colonise new areas. Ruddy Darter and Emperor Dragonfly are now regularly recorded at Watchtree, both species relatively recent additions to the north Cumbrian fauna.

Watchtree Bird Ringing Group.

During 2011 we ringed 1435 birds of which 663 were new birds, 586 were nestlings and 186 were re-traps or recoveries of 43 Species. We do ring on some other sites especially Barn Owls and Swallows. The highest number of a single species was 140 Willow Warblers plus 18 nestlings and 31 sightings of colour ringed birds and re-traps. Willow Warblers are a special study we have been doing for 4 years now. This species has become quite scarce in southeast England but seems to be increasing in our area. At Watchtree of course we have an ever-increasing area of suitable habitat as the woodland and scrub develops. We continue to make a big effort to find our colour ringed birds and mark their territories, as the volume of information grows we shall soon be able to write an article about them.

We also ringed 158 Tree Sparrow nestling in the nest boxes on site with many of the pairs producing 3 broods between May and August. We think productivity is boosted by the summer feeding which keeps the adults in very good condition and allows all of the caterpillars to be fed to the chicks. This prolific little bird just adds some new nest material over the old nest and within two weeks of the first brood fledging it has started to lay again.

We were excited to catch a Nuthatch, our first for the site.

Watchtree

NATURE RESERVE

We also do nest finding and recording for the BTO and located 113 nest at Watchtree, several were Blue Tit, Great Tit and Tree Sparrow in the nest boxes but there was a good variety of 'open nest' species including Willow Warbler, Chiffchaff, Blackcap, Garden Warbler, Blackbird, Song thrush, Sedge Warbler, Reed Bunting and Linnet.

During the year two new trainees, Steve and Alex, joined us and we have another two people who are also interested in ringing.

Another BTO project we were involved with was taking swabs from the feet and flanks of Willow Warbler, Chiffchaff, Blackcap and Garden Warbler. The swabs were sent to Aberdeen University for tests to find out if these migratory species could be carrying a virus that is causing the sudden deaths of various trees and shrubs. The disease is spreading in an erratic way that suggests it is being transferred by birds or animals moving long distances.

The full tables of results will be on our web site under the Education – resources link at present although we hope to start a ringing group page.

Frank Mawby

Chairman

19th June 2012