



Kenfig Natura 2000 Project NRW Competitive Fund

Mark Blackmore January 2018

Output Report



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1. Outputs

1.1 What are the outputs created by your project, how will you measure them and by when will you achieve them?

	Output	Measure	Timescale
1	Habitat Improved – Dune stabilisation halted or reversed.	500m2	By end of year 3.
2	Habitat Improved - Reduce invasive species.	500m2	Per year.
3	Habitat Improved – reduce dog fouling	10,000m2	By end of year 2.
4	Access improved, created – rationalisation of the rights of way.	3km	By end of year 3.
5	Volunteer Events	12 events and 120 volunteers	By end of year 3.
6	Educational visits – Primary Schools	20 Groups	Per year.
7	Educational visits – Secondary Schools	20 Groups	Per year
8	Educational visits – Further & Higher education.	10 Groups	Per year.
9	Educational Events	4 Events 120 participants	Per year
10	Structured work placements	3 Groups 30 participants.	By end of year 3.

2. Progress on Outputs

2.1 Habitat Improved – Dune stabilisation halted or reversed.

Habitat Improved – Dune stabilisation halted or reversed, by end of year 3.

Outcome: The 500m² of improved habitat by the halting or reversal of dune stabilisation will restore and protect the landscape character of the reserve and provide dunes slack habitat for native species.

2.1.1 2015 / 2016



This year the NRW Competitive Grant has allowed the Reserve Staff and volunteers to concentrate on scrub clearance and mowing large sections of the reserve, keeping the encroachment of vegetation at bay and reversing dune stabilisation. The grant has paid for two high quality petrol mowers that the volunteers have been using in the grasslands of the reserve. This has enabled mowing in the following areas all of which are important fen orchid habitat:

- Large blow out slack (Grid Ref: SS78898203) 100m²
- West of large blow out slack (Grid Ref: SS78798205) 400m²
- Track to L-post slack (Grid Ref: SS78688113) 100m²

A problem identified when developing this project that was when doing vegetation clearance with volunteer is it isn't long before there are considerable trees that need removal to continue clearing the small scrub. This slows down or stops the volunteer work in that area and the Warden has to return to cut those trees down at a later date.

Funding for contractor and plant hire this year has been spent on chainsaw contractors to work alongside the volunteers, removing large trees as they are encountered and freeing up the warden to manage the volunteers. This has made the vegetation clearance events more efficient and productive. An estimated 1000m² of habitat has been cleared and improved in this way at Compartment 3 south west of Kenfig Pool (Grid Ref: SS790809).

The aim of the NRW grant for Kenfig is to better manage the Natura 2000 site so that staff can concentrate on habitat protection and improvement. This approach has freed up more time for the warden to focus autumn mowing. As shown below, this has allowed some large scale habitat improvement to take place with a 161,000m² of habitat improved this year.



Therefore there have been 162,600m² of habitat Improved through dune stabilisation halted or reversed.

2.1.2 2016 / 2017

Autumn / winter 2016 saw the most ambitious dune slack habitat creation project since NRW used heavy plant to create dune blowouts by the coast, deep into the reserve, several years ago. We undertook a dune slack habitat creation project in the south slack just south of Kenfig Pool. The aim was to create new dune slack habitat that could be studied by education groups without the need to trek hours out into the reserve.



The south slack has been overgrown for many years and there have been less and less newts (including Great Crested Newts) recorded, as the slack becomes more and more wooded. The aim of the south slack habitat creation project was to build on the new model of using volunteers and contractors together to work smarter and more efficiently. We also built on this model by planning our work placements for Welsh Bacalaureate and Swansea University students to coincide with this large project giving the students an opportunity to work alongside BCBC staff, other volunteers and contractors.

The ambitious project aimed to have large scale deforestation of the wooded areas, stumps physically removed, scrub cleared and the whole area scrapped back to bare sand. Due to the sensitive nature of the site and the need to do the work under licence, the Amphibian and Reptile Conservation Trust (ARC) was contracted to do the work alongside the volunteers and students.



The project took several weeks to undertake and a tremendous amount of BCBC staff time, contractor time, work placement and volunteer time went into the project. The woodland was entirely removed and **20,000m² of dune slack was created**, four times the target of dune slack habitat to be created under this output.



2.1.3 2017 / 2018



The management changes implemented in previous years by the NRW / RDP Natura 2000 are now the normal operating method at Kenfig NNR. Volunteers are better supported and managed and work is coordinated to have volunteers, work placement students and contractors working alongside each other. This coordinated way of working has increased scrub clearance to reverse dune stabilisation by 80%.

Throughout 2017 volunteers have cleared large meadow areas with the lawnmowers, removed scrub increase tractor mowing areas and continued reclaiming the south slack area, removing scrub and trees restoring dune slack habitat.



This clearance was dramatic in the winter months (see above) as large areas of scrub and trees were removed.

Education of the public was required to share the benefits of what the project was trying to achieve in terms of new habitat creation. We were helped in this endeavour by a pair of lapwings who arrived in the spring draw by the new habitat. The large crop of early purple orchids that populated the new slack later in the spring really demonstrated the value of the clearance work NRW and RDP have funded.



In total 103,953 m² of habitat has been improved through dune stabilisation halted or reversed in 2017. This brings the total area improved over the length of the three year project to 286,553m². This far exceeds the grant application target of 500m² and the aspirational target of halting or reversing dune stabilisation 10,000m² per year that we set ourselves after it became clear in the first year that we would exceed our target easily.



2.2 Habitat Improved - Reduce invasive species.

Habitat Improved - Reduce invasive species, 500m² per year.

Outcome: The 500m² of improved habitat by reducing invasive species will reduce the problem spreading by removal before the plants produce seed. It will also allow native species to thrive without being out competed by the invasive species. A move away from invasive species to native plant creates a more varied habitat increased biodiversity.

2.2.1 2015 / 2016



To achieve this output the staff and volunteers at Kenfig have been waging a war against Himalayan Balsam on site. Balsam pulling has been undertaken near the caravan site with an estimated 10,000m² of the invasive species cleared.

2.2.2 2016 / 2017



The biggest threat to the habitats at Kenfig NNR is the dune stabilisation by encroaching scrub. It has been agreed with NRW and the project steering group that scrub is an invasive species on this site. The volunteers have continued to wage war against the Himalayan Balsam on site and contributed to the removal of scrub and mowing using the lawn mowers bought by the project last year.

Better management of the site facilitated by the NRW competitive fund and match funding by RDP has freed up the warden to undertake extensive tractor mowing in the autumn. All these efforts combined have **improved 7500m² of habitat by the removal of invasive species**, which is 15 times the target this year.

2.2.3 2017 / 2018



Scrub clearance has continued in year three of the Natura 2000 project, again with the increased efficiency of the smarter way of working pioneered by the NRW / RDP funding.

This year we have **improved 26,544m² of habitat by the removal of invasive species.** Again this above target for the year and gives a **final figure of habitat by the removal of invasive species to 44,044.** This exceeds the targets set by the original funding bid significantly.

2.3 Habitat Improved – reduce dog fouling.

Habitat Improved – reduce dog fouling, 10,000m² by end of year 3.

Outcome: The 10,000m² (Wrongly stated as 500m² in outcomes in application) of habitat improved creates a safer and more pleasant environment for visitors, school groups, staff and volunteers. It encourages more visitors and repeat visits to the site.

This 10,000m² represents the whole of the reserve which should be improved by reduced dog fouling across the site.

2.3.1 2015 / 2016



New more functional bins have been purchased to encourage people to clear up and litter less in the reserve. These new bins replace the old bins. The new bins are recycled plastic and will withstand the harsh Kenfig environment better than the existing bins which means they will look better for longer. The new bins are bigger and easier to empty solving the problem of bins overflowing at busy times. The new bins are the first positive steps in the Dog Fouling Campaign planned for year two.

Kenfig NNR Signage has been installed at the key entrances to the Reserve (including the second car park and from the Wales Coastal Path) so that visitors know when they are entering the Reserve. There is a perception that some visitors enter the Reserve from routes other than the main carpark and this gives them a right to ignore the dog fouling restrictions within the Reserve. This is especially true of the second car park. The new signage makes it very clear that people are entering the Reserve no matter what route they take. This is directly aimed at reducing dog fouling in those areas.

2.3.2 Additional work between claim & end of financial year 2016



In the two months between the 2015 / 2016 claim and the end of the financial year the bins have been installed completely on the reserve. These bins are more attractive than the old bins hopefully encouraging visitors to use them. They have wider opening to accommodate larger litter that has previously be abandoned next to the bins when it couldn't fit in. Reserve staff and volunteers have found the new bins larger so that they overflow less at busy times. They have also found them easier to empty.



2.3.3 2016 / 2017



There has been extensive work in 2016 to reduce dog fouling and increase responsible dog ownership as a whole in the reserve. PONT the grazing charity have similar goals to reduce dog fouling and improve the behaviour of dog owners. Working in partnership with PONT, Kenfig NNR hosted a dog behaviour awareness event on 11th June 2016 called “Hooves and Hounds”. It focused on dog fouling and the importance of keeping dogs on a lead around livestock. It was a fun event with a dog show, dog agility demonstration and livestock for people to see. About 50 people attended the event.



The project has also been working hard this year on a campaign to improve the behaviour of dog owners on site. This year saw the consultation element of that campaign. A day long consultation event was undertaken and 50 people attended throughout the day. The event was undertaken in partnership with the Dogs Trust who were onsite offering chip checking or free micro chipping for dogs that weren't chipped. This was a real draw as it is

now illegal not to have your dog chipped. In the advertising we said that we were keen to hear people's views and ideas on improving dog behaviour on site. It was quite an emotive subject and we were able to gain a lot of qualitative information through a questionnaire and going through that questionnaire in detailed interviews with visitors. 31 dogs either had incorrect chip details corrected or were micro-chipped for the first time.



Over the day 50 people were surveyed. The information gathered from the consultation has been analysed and used to design an awareness campaign to be implemented May / June 2017, with the aim of reducing dog fouling across the whole site by the end of the project.

2.3.4 2017 / 2018



In the final year of the project we have continued to raised awareness of the importance of good dog behaviour on site, including the importance of cleaning up dog fouling. Partnership working has continued with Bryngarw Park, the Wildlife Trust, PONT and NRW

(particularly NRW's Spirit of Llynfi Project) to share ideas on reducing dog fouling and promoting good dog behaviour.

We have developed training for Volunteer Dog Wardens, recruited volunteers to be wardens and trained them. They are now very active in patrolling the Reserve. We have made the training available to partner organisations and will be holding more training in 2018. Signage has been made to let visitors know that the volunteer wardens are on site and you will be challenged about dog fouling. This work has resulted in dog fouling being reduced across the Reserve and in turn the habitat improved. So we have been very successful in delivering this output of the project.



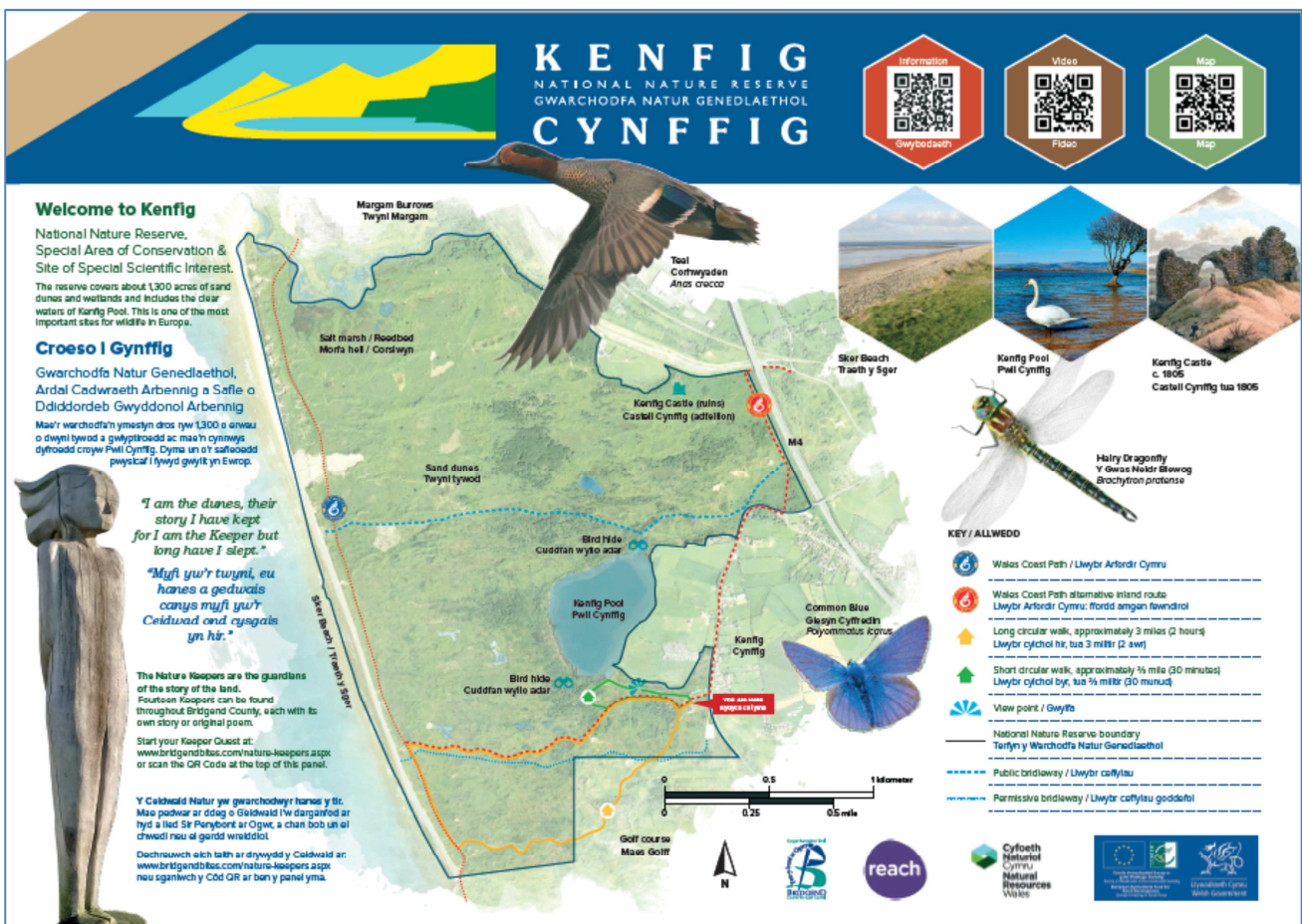
2.4 Access improved, created – rationalisation of the rights of way.

Access improved, created – rationalisation of the rights of way, 3km by the end of year 3.

Outcome: 3km of improved access by the rationalisation of rights of way, will reduce conflict between reserve users such as dog walkers and horse riders. It will make the reserve more accessible and the resulting erosion through increased in footfall will help to prevent dune stabilisation.

2.4.1 2015 / 2016

Alison Roberts has joined the Project Steering Group to represent BCBC Rights of Way and the Wales Coast Path. Core routes through the Reserve have been identified. A new map has been produced for the reserve showing these core routes.



The map is displayed in the main car park and on the Reserve Centre Wall. The map is also available online and in leaflet form. Kenfig NNR Signage has been installed at the key entrances to the Reserve (including the second car park and from the Wales Coastal Path) so that visitors know when they are entering the Reserve.

2.4.2 Additional work between claim & end of financial year 2016

In the two months between the 2015 / 2016 claim and the end of the financial year the signage has been completed and installed on site. This includes interpretation on the Reserve Centre.



Matching interpretation has been installed in the main car park including the new reserve map. This interpretation welcomes people into the reserve and helps them to find their way around the reserve using the correct core routes.



Signage based on the new Kenfig logo developed for this project has now been installed on all key entrances to the reserve, including the second car park and paths off the Wales Coast Path. It is now impossible to enter the reserve without being informed that you are in Kenfig National Nature Reserve.



2.4.3 2016 / 2017



2016 has seen further work to improve the rights of way signage and access to the site. The main two footpaths have been labelled with very clear signage as can be seen above. The carpark has seen replaced directional signage to ensure that the one way system is adhered to and it is more difficult to accidentally drive in the prohibited parts of the site.



The disabled car parking spaces were not only looking very tired they also no longer complied with legislation on disabled car parking. We have used grant money from the project to repaint these disabled spaces and ensure that they are now legally compliant. The bulk cost of this work is getting a painting crew onsite, therefore we maximised value for money by getting double yellow lines painted on the bottom car park where there had been lots of inconsiderate parking when the barrier was shut.



Kenfig branded signage has also been installed at the bus stop.

2.4.4 2017 / 2018



We have continued to improve and maintain rights of way signage across the site. Interpretation from previous years is now being used by visitors, with horse riders staying on the bridleway more and walkers sticking to footpaths. This has reduced user group conflict considerably.

New visitors are encouraged to use the leaflet developed and printed by the project to orientate themselves and use the designated footpaths to get around the reserve. Access improved by better signage and volunteer maintenance and scrub clearance across the 3km of rights of way designated on site. Therefore over the three year project we have achieved - **Access improved, created – rationalisation of the rights of way, 3km.**



2.5 Volunteer Events

Volunteer Events, 12 events and 120 volunteers by end of year 3.

Outcome: 12 Volunteer events will increase the use of the site and contribute to habitat improvement through countryside management activities such as scrub clearance.

2.5.1 2015 / 2016



Regular volunteering takes place at Kenfig every Wednesday and Sunday with an established and enthusiastic volunteer group. The NRW competitive grant has enabled specific volunteer events that have challenged the volunteers, developed their skills and have targeted key actions needed to manage the reserve more effectively. **11 Events were undertaken this year with 86 participants**, so the project is well on target to achieving this output in year 3. The events undertaken are listed on the following page.

Event	Date	Event	No of Vol.s
1	12/08/15	Balsam Bashing – both pulling balsam and using brush cutters.	8
2	26/08/15	Specific mowing event Balsam pulling and volunteers using the new lawn mowers on the grassland near the carpark.	9
3	02/09/15	Reed clearance at the South Hide using brush cutters and reed cutters.	8
4	23/09/15	Completion of reed clearance at South Hide.	7
5	30/09/15	Cutting at West Pool Slack. Including cutting back of blackthorn encroaching the path. Stems treated and cuttings burned.	9
6	07/10/15	Cutting and raking Fen Orchid Hollow. Using brush cutters and rakes.	7
7	10/10/15	Reed clearance and coppicing – Cardiff Conservation Volunteers & Duke of Edinburgh volunteers.	13
8	14/10/15	Clarke Slack – mowed, birch cut, stumps treated.	7
9	18/11/15	Humid Slack - Large scale targeted scrub clearance with volunteers working alongside the contractors.	6
10	22/11/15	Tree clearance new glade on yellow trail.	8
11	25/11/15	Large scale targeted scrub clearance with volunteers working alongside the contractors.	4

2.5.2 2016 / 2017

The better management of Kenfig NNR through this project has enabled increased provision of volunteer events.

No	Date	Organisation	No.	Event	Leader
1	23/03/2016	Kenfig Volunteers	6	Blackthorn Glade Clearance	David Carrington
2	30/03/2016	Kenfig Volunteers	6	Boardwalk Repair N. Hide	David Carrington
3	25/04/2016	Kenfig Volunteers	7	Viewpoint Clearance	David Carrington
4	27/04/2016	Kenfig Volunteers	6	Bat Boxes N. Hide	David Carrington
5	11/05/2016	Kenfig Volunteers	8	Badger Habitat Management	David Carrington
6	21/06/2016	Lloyds Bank	10	Staff Volunteering Day	Rachel Owen
7	19/10/2016	Kenfig Volunteers	7	Cut and raked South Hide rides.	David Carrington
8	23/10/2016	Cardiff Conservation Volunteers	13	Scrub / reed bank clearance	Julia
9	26/10/2016	Kenfig Volunteers	5	South Slack Willow Clearance	David Carrington

This year there have been **9 events with 68 participants**. That gives a running total of **20 events with 154 participants**. Therefore even before all the events we have planned for next year we have already beaten our target for volunteer events in this output.

2.5.3 2017 / 2018

Volunteer events are now central to the improved management of the Special Area of Conservation enabled by this funding. There has been a significant increase in volunteer event activity this year.

No	Date	Organisation	No.	Event	Leader	
1	25/01/2017	Kenfig Volunteers	7	Clearing Southern Bridleway	David Carrington	
2	08/01/2017	Kenfig Volunteers	8	Crelin Slack Clearance.	David Carrington	
3	22/02/2017	Kenfig Volunteers	10	Birchwood Clearance	David Carrington / Rob Jones	
4	08/03/2017	Kenfig Volunteers	6	Repair of North Hide	David Carrington	
5	22/03/2017	Kenfig Volunteers	7	Clearance alongside contractor	David Carrington	
6	19/04/2017	Kenfig Volunteers	1	7	Butterfly Transect	David Carrington
7	26/04/2017	Kenfig Volunteers	1	9	Clearance around Centre	David Carrington
8	28/06/2017	NRW / Kenfig NNR	1	12	Fen Orchid Survey	Emma Brown / D. Carrington
9	19/07/2017	NRW / Kenfig NNR	1	12	Fen Orchid Survey	Emma Brown / D. Carrington
10	26/07/2017	Kenfig Volunteers	1	8	Ragwort Pulling	David Carrington
11	02/08/2017	Kenfig Volunteers	1	7	Slack mowing & Orchid Seeding	David Carrington
12	27/09/2017	Kenfig Volunteers	1	8	Orchid Sillocks mowed & raked	David Carrington
13	01/11/2017	Kenfig Volunteers	1	9	Odin Slack Clearance	David Carrington
14	08/11/2017	Kenfig Volunteers	1	8	Clearing Pipe Swim	David Carrington
15	21/11/2017	NRW Permits Team	1	6	Volunteer Scrub Clearance	Natalie Wrangham
16	13/12/2017	Kenfig Volunteers	1	8	Working alongside contractor	David Carrington
17	20/12/2017	Kenfig Volunteers	1	8	Working alongside contractor	David Carrington
		Total	17	140		

This year there have been **17 events with 140 participants**. That gives a running total of **37 events with 294 participants**. Well exceeding the target of 12 events and 120 volunteers by end of year 3.

2.6 Educational visits – Primary Schools

20 Groups per year.

Outcome: 20 primary school groups on educational visits will increase the use of the site and educate children about that plants and animals need a home, and introduce habitats as the variety of homes for those plants and animals.

2.6.1 2015 / 2016

Though NRW funding was secured by April 2015, RDP match funding was not approved until August 2015. Therefore the project started after the school year had ended. This effectively meant that the only time available for primary school groups was September to December 2015. These winter months are the least suitable for primary school visits so we have not met this target this year.

The spring and summer months of 2016 should be much more suited to primary school visits this year, and we should hopefully be back on target.

2.6.2 Additional work between claim & end of financial year 2016

A local artist was commissioned to create a welcoming artwork on the Reserve Centre wall. After consultation with the public and stakeholders it was agreed that the key species from the reserve would be painted on the wall. The design of the artwork was developed from working with pupils in Afon Y Felin School close to the Nature Reserve. As part of this commission the Artist produced an artwork for the school too. The work with the school and the artwork produced can be seen below.



The completed Reserve Centre artwork can be seen below.



2.6.3 2016 / 2017



The educational activities at Kenfig NNR have been considerably enhanced by this project. Signage and interpretation have been improved on site and there is a great leaflet for the reserve. There have been teacher packs and family packs produced that can be downloaded by teachers before they visit the site. These packs contain lesson plans and risk assessments that make it easier to bring pupils on site and give them rewarding activities when they are here. There have been more schools using the site this year, but there is a slight problem of some schools attending the site but not informing us that they are coming. As well as the health & safety issues with schools coming on site without informing reserve staff, their attendance is not being recorded for the project. The recorded visits were as follows:

No	Date	Organisation	Groups	No.	Event
1	23/03/2016	Llangewydd Juniors	3	90	Pond Dipping
2	12/05/2016	St. Marys & St. Patricks Primary	1	14	Pond Dipping
3	17/05/2016	Pentyrch Primary	3	61	Pond Dipping
4	25/05/2016	Cwm Parc Primary	3	61	Pond Dipping
5	20/06/2016	Old Castle Junior School	2	54	Plant Field Trip
6	13/07/2016	Afon Y Felin School	2	46	Outdoors Schools
7	18/07/2016	Old Castle Junior School	2	50	Plant Field Trip

There were **16 primary groups recorded visiting the site with 376 recorded participants**. Though this is 4 groups under our target it is a vast improvement on last year. The target would have been met if groups visiting the site were better recorded. For

example there were two other classes from another school on site when Afon Y Felin were visiting on 13th of July, but that school never informed the reserve that they were coming and it is unknown which school they came from. With continued improvement to the site and an increased focus on recording visiting school groups the target should be met next year.

2.6.4 2017 / 2018

This is the only output that the project has failed to deliver. This year the following primary school groups were recorded on site:

No	Date	Organisation	Groups	No.	Event
1	12/06/2017	Llangenith Primary	2	50	Pond Dipping
2	15/06/2017	Cilfton College	1	25	Field Trip
3	05/07/2017	Llwyn Derw Primary (Gower)	1	25	Trip about Santampa
4	14/07/2017	St. Joesph's School	1	25	Fieldtrip
		Total	5	125	

This gives a total of 21 primary school groups recorded visiting Kenfig National Nature Reserve. We have failed to meet our target, but there is a rational for this, that is twofold.

Firstly the rugged nature of the site and its challenging terrain is more suited to older students. The long walks to get to the more educational habitats are prohibitive to younger children. Secondly there are definitely more primary schools visiting the Reserve than we are recording. There is further work ahead to engage with primary school teachers to communicate that we need to know when they are on site. This would be beneficial not only from a health & safety point of view, but it would also enable us to signpost teachers to the fantastic learning materials that we have developed as part of this project.

2.7 Educational visits – Secondary Schools

20 Groups per year.

Outcome: 20 secondary school groups on educational visits will increase the use of the site and educate young people about ecosystems, climate change and the importance of biodiversity as a local and global resource.

2.7.1 2015 / 2016

The secondary school visits suffered the same problem as the primary school visits. Though NRW funding was secured by April 2015, RDP match funding was not approved until August 2015. Therefore the project started after the school year had ended. This effectively meant that the only time available for school groups was September to December 2015. These winter months are the least suitable for school visits so we have not met this target this year. We did have one secondary school visit in the winter months and that was:

Group	Date	Primary School	No of Pupils	Event	Leader
1	13/10/2015	Priory School	23	Geography field trip and lecture by DC in lecture room.	Richard Harrington/DC

2.7.2 2016 / 2017

The secondary schools have benefited from the improvements to the Kenfig NNR educational offering mentioned in the previous section. As well as those improvements there is now free Wi-Fi on site and digital facilities have been improved within the classroom. A new monitor has been installed, tablet computers can be loaned to classes and some augmented reality interpretation has been produced along with some traditional interpretation boards for the inside of the classroom and inside the hide on the lake. The following secondary schools were recorded attending the site for educational visits this year:

No	Date	Organisation	Group s	No	Event	Leader
1	12/06/2016	Godolphin & Latymer School	3	62	Biodiversity Lecture	David Carrington
2	29/06/2016	Bryntirion Comprehensive	2	40	Geography Field Trip	Mr Jones
3	30/06/2016	Bryntirion Comprehensive	2	48	Geography Field Trip	Mr Jones
4	07/07/2016	School of Christ the King	2	30	Beach Visit	Simon Squire
5	11/07/2016	Bryntirion Comprehensive	3	53	Geography Field Trip	Mr Jones
6	13/07/2016	Porthcawl Comprehensive	1	15	Beach Clean	David Carrington
7	15/07/2016	St. Joesphs High School, Newport	1	10	Field Trip	Mary Davies

There were **14 groups visiting the site with 258 students**. Similarly to the primary school visits this was under target (6 groups under target), but was an improvement on last year, effected by schools not informing the reserve when they are visiting, and is expected to be on target next year.

2.7.3 2017 / 2018

The funding from NRW and RDP on this project has really enabled us to focus on attracting secondary schools to study in the rare dune habitats. As a result of this we have seen a huge increase in secondary school visits this year.

No	Date	Organisation	Groups	No.	Event	Leader
1	09/03/2017	Cheltenham Bourneside Secondary	2	43	Human Impacts on Dunes	Rachel Narles
2	10/06/2017	Godolphin Secondary School	3	55	Lecture and field trip.	Heather Margam DC
3	26/06/2017	Brynterion Comprehensive	1	28	Fieldtrip	Mark Blackmore
4	27/06/2017	Brynterion Comprehensive	1	25	Fieldtrip	David Carrington
5	28/06/2017	Brynterion Comprehensive	1	26	Fieldtrip	David Carrington
6	03/06/2017	Brynterion Comprehensive	3	52	Fieldtrip	David Carrington
7	10/07/2017	Ysgol Gwynllyw, Pontypool	1	14	Fieldtrip	Glyn Rogers
8	14/07/2017	Bristol Free School	1	17	Fieldtrip	Selina Lavis
9	17/07/2017	Whitchurch High School Cardiff	2	45	Sand Dune Ecology	Ceri Taylor
10	18/07/2017	Ysgol Bro Morganwg	1	16	Fieldtrip	Miss Evans
11	21/09/2017	Broad Oak School, Weston	3	58	GCSE Fieldtrip	Michelle Reid
12	28/09/2017	Caldicot Comprehensive	1	6	Fieldtrip	Sian Fowler
13	03/10/2017	Priory School	1	18	A-level Fieldtrip	Richard Harrington
14	09/10/2017	Bishop of Llandaff School, Cardiff	1	19	Fieldtrip	Ellen Kettleswell
15	19/10/2017	Bishop of Llandaff School, Cardiff	1	25	Fieldtrip	Ellen Kettleswell
		Total	23	447		

There have been **23 Secondary Schools visiting this year**, which has brought visits up to the level we set a target for in the funding bid. It is this output that has seen the most improvement as the project has progressed.

2.8 Educational visits – Further & Higher education.

10 Groups per year.

Outcome: 10 further & higher education group on educational visits will increase the use of the site and will provide opportunities for data collection and fieldwork that will meet students coursework needs but also provide survey data for the reserve.

2.8.1 2015 / 2016

Ten groups have visited Kenfig NNR this year with a total of 420 students visiting from those groups. The breakdown of visits is as follows:

Group	Date	Organisation	No of Students	Event	Leader
1	06/08/15	Swansea University	45	Undergraduate Y3 Field Course. Undertaking fixed dune and dune slack ecological surveys.	Laura Roberts
2	14/09/15	Cardiff University	50	Field study week using Kenfig to survey ground beetles and plants with lecture on Kenfig by DC	Richard Cowie/DC
3	15/09/15	Cardiff University	50	Field study week using Kenfig to survey ground beetles and plants with lecture on Kenfig by DC	Richard Cowie/DC
4	16/09/15	Cardiff University	50	Field study week using Kenfig to survey ground beetles and plants with lecture on Kenfig by DC	Richard Cowie/DC
5	17/09/15	Cardiff University	50	Field study week using Kenfig to survey ground beetles and plants	Richard Cowie
6	08/09/15	Swansea University	30	Field Trip Undergraduate Y3 Field Course. Undertaking fixed dune and dune slack ecological surveys.	Laura Roberts
7	10/09/15	Swansea University	35	Undergraduate Y3 Field Course. Undertaking fixed dune and dune slack ecological surveys.	Laura Roberts
8	14/09/15	Swansea University	40	Undergraduate Y3 Field Course. Undertaking fixed dune and dune slack ecological surveys.	Laura Roberts
9	15/09/15	Swansea University	40	Undergraduate Y3 Field Course. Undertaking fixed dune and dune slack ecological surveys.	Laura Roberts
10	07/10/15	Royal Agricultural College	30	Field trip with talk by DC out on reserve	Ian Grange

2.8.2 2016 / 2017

There have been several further education visits to the reserve, but it is the use by higher education that is most popular. Both Swansea University and Cardiff University have had specific weeks on site as a base for the biological students to do field work. The use by FE & HE students this year is as follows:

No	Date	Organisation	Groups	No.	Event	Leader
1	24/04/2016	Swansea University	1	12	Sediment Surveying	Tony Thomas
2	02/05/2016	Writtle College	2	40	Conservation Students	Alan Roscoe
3	11/07/2016	Whitechurch High School	2	40	6th Form Field Trip	Anne Davies
4	05/09/2016	Swansea University	4	145	Field Week	Laura Roberts
5	12/09/2016	Cardiff University	4	60	Field Study Week	Ian Vaughan

There were **13 groups** visiting the site with a total of **297 students**.

2.8.3 2017 / 2018

Higher and future education visits to Kenfig continued to be popular in 2017. This was helped by strong partnership working between BCBC, Swansea University and Cardiff University.

No	Date	Organisation	Groups	No.	Event	Leader
1	12/09/2017	Swansea University	2	23	Fieldwork	Laura Roberts
2	13/09/2017	Swansea University	2	23	Fieldwork	Laura Roberts
3	14/09/2017	Swansea University	2	25	Fieldwork	Laura Roberts
4	02/10/2017	Cardiff University	2	28	Plant Survey and Lab	Frank Hailer
5	03/10/2017	Cardiff University	2	28	Plant Survey and Lab	Julia Sanches

We met the target of **10 groups** and that included **127 students**.

2.9 Educational Events

4 Events and 120 participants per year.

Outcome: 4 educational events will increase the use of the site and value for local communities. The events will provide an opportunity to involve partner organisations in the Bridgend Countryside Volunteer Network and promote working collaboratively.

2.9.1 2015 / 2016

There have been **4 educational events this year with 340 participants**. These events were:

Date	Organisation	No of people	Event	Leader
01/10/2015	Héronsbridge Group	10	Medicinal Plant Guided Walk	Rob Jones
03/10/2015	Girl Guides Association	240	Environmental Activity Day	RSPB/GBC/DC
22/10/2015	1st Nottage Cubs and Beavers	45	Bat Walk	DC
13/12/2015	Kenfig National Nature Reserve	45	Christmas Craft Event	Mark Blackmore

2.9.2 2016 / 2017

There have been **38 educational events in 2016 with 723 participants**. This increase in events (well above the target for this output) is due to the change of site management facilitated by this project, that makes visitors more self-managing and frees up staff to focus on educational activities. The breakdown of events in 2016 is:

No	Date	Organisation	Groups	No.	Event	Leader
1	30/11/2016	CADDT	3	83	Easter Egg Hunt	Adrian Morgan
2	16/04/2016	Keep Wales Tidy	1	23	Rubbish Day Out	Brian Jones
3	02/05/2016	TLC	1	38	Environmental Fun Day	Julie Addis
4	08/05/2016	Glamorgan Bird Club	3	90	Big Birding Day	David Carrington
5	15/05/2016	Nottage Scouts	8	180	Environmental Fun Day	Anne Davidson
6	21/05/2016	Glamorgan Bird Club	1	8	Birding for Beginners	David Carrington
7	28/05/2016	Glamorgan Fungi Group	1	10	Fungi Walk	Mark Dear
8	11/06/2016	PONT & Reach	3	50	Hooves & Hounds	Emma Douglas
9	18/06/2016	Glamorgan Bird Club	1	15	Birding for Beginners	David Carrington
10	16/07/2016	Glamorgan Bird Club	1	9	Birding for Beginners	David Carrington
11	20/08/2016	Glamorgan Bird Club	1	7	Birding for Beginners	David Carrington
12	17/09/2016	Glamorgan Bird Club	1	11	Birding for Beginners	David Carrington
13	15/10/2016	Glamorgan Bird Club	1	15	Birding for Beginners	David Carrington
14	12/11/2016	Glamorgan Fungi Group	1	30	Looking at Sand Dune Fungi	Mike Bright
15	19/11/2016	Glamorgan Bird Club	1	9	Birding for Beginners	David Carrington
16	01/12/2016	Reach	5	50	Dog Consultation Day	Mark Blackmore
17	11/12/2016	Reach 7 Kenfig Volunteers	5	95	Christmas Countryside Craft Fair	Mark Blackmore

2.9.3 2017 / 2018

The change in management facilitated by this project has put educational events at the heart of environmental education within the reserve.

No	Date	Organisation	Groups	No.	Event	Leader
1	18/02/2017	Glamorgan Bird Club	1	12	Birding for Beginners	David Carrington
2	18/03/2017	Glamorgan Bird Club	1	21	Birding for Beginners	David Carrington
3	15/04/2017	Glamorgan Bird Club	1	13	Birding for Beginners	David Carrington
4	30/04/2017	Glamorgan Bird Club / Kenfig NNR	3	70	Big Birding Day	David Carrington
5	02/04/2017	Dogs Trust	1	45	Awareness Campaign Van	Malcolm Stagg
6	13/05/2017	Kenfig NNR	1	8	Breeding Birds Lecture	David Carrington
7	21/05/2017	Bridgend Scouts	8	230	Scouts Environmental Fun Day	Anne Davidson
8	03/06/2017	Glamorgan Fungus Group	1	8	Fungus Foray	Mark Steer
9	18/06/2017	Dursley Bird Club	1	20	Field Visit	Mike
10	05/07/2017	Reach	3	8	Dog Warden Training	Mark Blackmore
11	20/07/2017	Reach	1	3	Dog Warden Training	Mark Blackmore
12	21/10/2017	Glamorgan Bird Club	1	10	Birding for Beginners	David Carrington
13	18/11/2017	Glamorgan Bird Club	1	11	Birding for Beginners	David Carrington
14	10/12/2017	Kenfig NNR / Reach	2	72	Christmas Countryside Craft Fair	Mark Blackmore
15	16/12/2017	Glamorgan Bird Club	1	19	Birding for Beginners	David Carrington

There have been **27 events with 550 participants** in the final year. This well exceeds the target of 4 events a year with 120 participants.

2.10 Structured work placements

3 Groups and 30 participants, by the end of year 3.

Outcome: 3 structured work placements will increase the use of the site, and provide opportunities for young people to develop work related skills and experience.

2.10.1 2015 / 2016



The NRW grant funding is enabling us to change the way we manage the site and also put a new emphasis on work experience and volunteering to get vocational skills. This target will be a major focus of years two and three but we already have had **5 Duke of Edinburgh students working on site this year**. They work on the weekends and you can see two of them above installing the new Sherwood bins bought out of the project budget.

2.10.2 2016 / 2017



2016 was very focused on providing structured work placements. This cumulated with taking a large group of Welsh Baccalaureate and Swansea University students on a work placement in the October half term. There was a tremendous need for this sort of work experience opportunity and we had twice as many applicants as we had places available. The breakdown of work placements was as follows:

No	Date	Organisation	Groups	No	Event	Leader
1	11/04/2016	Kenfig NNR	0	1	Sam Jones Work Experience	David Carrington
2	27/06/2016	Kenfig NNR	0	1	Ieuan Dixon 1 Week Work Ex.	David Carrington
3	11/07/2016	Kenfig NNR	0	1	Ella Cooks Work Experience	David Carrington
4	27/07/2016	Kenfig NNR	0	1	Paul Thompson Work Experience	David Carrington
5	10/10/2016	Kenfig NNR	0	1	Jack Mogford Work Experience	David Carrington
6	24/10/2016	Reach	1	11	3 Day Work Placement	Mark Blackmore

The individual placements have been counted as 1 group each year. There were **2 groups made up of 16 participants** this year. This gives a running total of **3 groups and 19 participants** so far. The group target has been achieved for this output and an additional 11 participants are required to achieve the overall target at the end of next year.

2.10.3 2017 / 2018



There have been have been 7 students volunteering to undertake work experience at Kenfig in 2017. I counted them as one group of students. We also provided a half term work placement in October that was very successful.

No	Date	Organisation	Groups	No	Event	Leader
1	19/02/2017	Duke of Edinburgh	1	3	Tree Removal Spit Grassland	David Carrington
2	24/04/2017	Zowie Iles	1	1	Work Experience Volunteering	David Carrington
3	18/06/2017	Sean Campbell		1	Work Experience Volunteering	David Carrington
4	31/07/2017	Savhanna		1	MSc Field work 3 weeks	David Carrington
5	25/09/2017	Callum Hancock		1	Work Experience Volunteering	David Carrington
6	30/10/2017	Swansea University	1	6	3 Day Work Placement	Mark Blackmore

There were **3 work placement groups in 2017 with 13 participants**. This gives a total of **6 groups and 32 participants** over the three years of the project, exceeding the target of 3 groups and 30 participants.

3. Additional Value Added by the Grant

3.1 Habitat Improved – Dune stabilisation halted or reversed.

The output target of “Dune stabilisation halted or reversed, 500m² by end of year 3” is quite a small target as was easily achieved in year one. Therefore the project aims to add value to the mandatory outputs by setting an additional aspirational target of halting or reversing dune stabilisation 10,000m² per year.

In year one that target has been exceeded with 162,600m² of habitat improved.

The aspirational target was doubled in year two with 20,000m² of dune slack created.

It was also greatly exceeded in year three with 103,953m² of dune habitat improved.

3.2 Habitat Improved - Reduce invasive species.

The output target of “Reduce invasive species, 500m² per year” again is quite a small target as was easily achieved in the first year. Therefore the project aims to add value to the mandatory outputs by setting an additional aspirational target of reduce invasive species 10,000m² per year.

That target was achieved in year one.

Though the original target was easily achieved in year two, a reduction of invasive species of 7500m² was just under our aspirational target, yet still impressive.

Refining the method of combining volunteers, work placement students and contractors has greatly increased the efficiency of scrub clearance in the management of Kenfig during the course of this project. This management change facilitated by the funding has led to 26,544m² being cleared in the third year, more than double the aspirational target.

3.3 Educational visits – Adult education and training.

Closing the visitor centre within the management changes brought about by within this project has created a learning space within the centre that is ideal for adult education or training. The centre has become a popular for away days and training staff, especially where an outside space is needed as well as a classroom. This is added benefit of the NRW funding that was not predicted.

In year one **there have been 15 groups with 245 people trained at the Reserve.** The breakdown of groups is as follows:

Group	Date	Organisation	No	Event	Leader
1	09/09/15	NHS	10	GP team training event	Peter Harrop
2	16/09/15	Bridgend Child Care Services	14	Training in lecture room	Self
3	18/09/15	Carers Social Visit	15	Walk at Kenfig	John Crocker
4	19/09/15	Community First Responders	14	Training for new volunteers in lecture room	Lyle Bluck
5	19/09/15	Bridgend Child Care Services	19	Training day in Slate Gallery	Self
6	23/09/15	Bridgend Child Care Services	14	Training in lecture room	Self
7	26/09/15	Community First Responders	14	Training for new volunteers in lecture room	Lyle Bluck
8	03/10/15	Community First Responders	14	Training for new volunteers in lecture room	Lyle Bluck
9	07/10/15	NRW	10	Photo monitoring training in lecture room	Clive Hurford
10	10/10/15	Community First Responders	14	Training for new volunteers in lecture room	Lyle Bluck
11	11/10/15	Community First Responders	14	Training for new volunteers in lecture room	Lyle Bluck
12	13/10/15	Glamorgan Bird Club	9	Committee meeting	DC
13	14/10/15	Bridgend Child Care Services	14	First aid training course	Self
14	17/10/15	Butterfly Conservation	60	AGM and lectures all day in lecture room	David Slade
15	21/10/15	Bridgend Child Care Services	10	First aid training course	Self

In year two **there have been 6 groups with 104 people trained at the Reserve.** The breakdown of groups is as follows:

No	Date	Organisation	Groups	No.	Event	Leader
1	19/04/2016	Freshwater Habitats Trust	1	15	Stonewort ID Training	Hannah Shaw
2	15/06/2016	BCBC Childcare	1	15	Childcare Training	
3	21/09/2016	NHS	1	12	GP Training	Peter Harrop
4	22/11/2016	PONT	1	24	Managed Grazing Training	Emma Douglas
5	23/11/2016	PONT	1	18	Managed Grazing Training	Emma Douglas
6	28/11/2016	Public Service Board	1	20	Health & the Outdoors	Geoff Hobbs

In year three **there have been 32 groups with 408 people trained at the Reserve.** This is in part due to a long term partnership with Barnados who find the Reserve Centre ideal for their nurturing course for parents.

No	Date	Organisation	Groups	No.	Event	Leader
1	20/03/2017	BCBC Countryside	1	3	Chipper Training	Rob Jones
2	26/04/2017	Reach	1	19	Digital Workshop	Geoff Hobbs
3	03/05/2017	Freshwater Habitats Trust	1	15	Bryophytes of Slacks	Sam Bosanquet
4	11/05/2017	Reach	1	6	Ambassador Training	Nicola Lewis
5	15/05/2017	BCBC Tourism	1	10	Ambassador Training	Alice Brown
6	02/06/2017	BCBC Countryside	1	11	Tool Sharpening Course	Rob Jones
7	08/06/2017	PONT	1	25	Conservation Grazing Seminar	Emma Douglas
8	08/07/2017	Plantlife	1	35	Members Training	Helen Bradley
9	05/08/2017	Bee Course	1	17	Bee training for volunteers	Liam Olds
10	07/09/2017	NRW	1	12	Away day	Sheryl Davies
11	09/09/2017	CEI	1	10	Humid Dune Slack Eco-Hydrology.	Rob Lowe
12	12/09/2017	NRW	1	5	Otter Training	Leila Thornton
13	19/09/2017	Police & Crime Commissioner	1	15	Away day	Sam Griffin
14	22/09/2017	BCBC Wellbeing	1	10	Wellbeing Training	Debra Mitchell
15	28/09/2017	Barnados	1	12	Nuturing Course	Susan Evans
16	04/10/2017	BCBC Wellbeing	1	7	Wellbeing Training	Val Hughes

17	05/10/2017	Barnados	1	12	Nuturing Course	Susan Evans
18	06/10/2017	BCBC Wellbeing	1	10	Wellbeing Training	Debra Mitchell
19	12/10/2017	Barnados	1	12	Nuturing Course	Susan Evans
20	19/10/2017	Barnados	1	12	Nuturing Course	Susan Evans
21	23/10/2017	NRW	1	8	Otter Training	Leila Thornton
22	25/10/2017	Police	1	30	Police Training Event	Andrew Slade
23	26/10/2017	Barnados	1	12	Nuturing Course	Susan Evans
24	03/11/2017	Barnados	1	12	Nuturing Course	Susan Evans
25	09/11/2017	Barnados	1	12	Nuturing Course	Susan Evans
26	10/11/2017	BCBC Wellbeing	1	10	Autism Training	Debra Mitchell
27	16/11/2017	Barnados	1	12	Nuturing Course	Susan Evans
28	17/11/2017	BCBC Wellbeing	1	10	Autism Training	Debra Mitchell
29	22/11/2017	BCBC Wellbeing	1	8	Wellbeing Training	Val Hughes
30	23/11/2017	Barnados	1	12	Nuturing Course	Susan Evans
31	30/11/2017	Barnados	1	12	Nuturing Course	Susan Evans
32	07/11/2017	Barnados	1	12	Nuturing Course	Susan Evans

