CLYDE MUIRSHIEL PARK AUTHORITY



Report to:Joint CommitteeOn:1 September 2017

<u>Report</u> <u>By</u> Regional Park Manager

SUBJECT: Clyde Muirshiel Regional Park Draft annual report 2016 to 2017

- 1.0 <u>Purpose of Report</u>:
- 1.1 To advise members of the Joint Committee of the goals reached by the Park and its staff during 2016 to 2017
- 2.0 <u>Recommendation</u>:
- 2.1 That the Park Authority notes the contents of this report and continues to support the Park in its development.
- 2.2 That the Park Authority recognises the Park's continued efforts to provide services effectively.

Members wishing further information regarding this report should contact Mr David Gatherer, Regional Park Manager, Clyde Muirshiel Park Authority, 01505 842882.

3.0 Background:

The Park continues to report on an annual basis its outputs for the year. This allows the Park Authority to comment on what has been achieved and also discuss pertinent items about the future development of the Park.

The report includes annual outcomes for finance, visitors, events held etc please see appendix 1 for full report.

4.0 <u>Conclusion</u>:

4.1 The Park continues to report its outcomes for each financial year which allows stakeholders to see what the Park has achieved and thus guide future development.



Annual Report 2016/17 Clyde Muirshiel Regional Park



Presented to the Park Authority Joint Committee September 2017

Clyde Muirshiel Regional Park Annual Report 2016/17

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1.0 Introduction

Clyde Muirshiel Park Authority is a Joint Committee of Renfrewshire, Inverclyde and North Ayrshire Councils.

The priorities of Clyde Muirshiel Park Authority are: -

- Leisure activity and health
- Education and outdoor learning
- Environmental management •

The benefits delivered by the Park Authority are recognised as making a positive contribution to wider national and local agendas in the areas of health improvement, active lifestyles, community engagement, volunteering and employability.

This report will present the work of the Park Authority and its staff in the year April 2016 to March 2017.

2.0 Executive Summary

2016/17 saw an increase in visitors to the Park of 44.464 to reach a total of 694,129. This increase is especially significant when considered within the context of further reductions in resources available to the Park Authority and its staff. The cost per visitor to the unitary authorities is now under £1.

2.1 Leisure Activity and Health

Outdoor activities continue to be a priority for the park in terms of income generation, visitor generation and income. In this context, additional funding was accessed during 2016/17 to provide further improvements for activity clients in the form of accessible equipment, a new sailing boat for disabled clients, 2 bell boats and extra adaptive bikes.

Ride 63 Cycle Club continues to grow in numbers and activities; the club now has nearly 100 members and has a programme of regular rides which is proving popular.

Specialist activity days including Spinal Injuries Scotland's activity showcase day (sponsored by Digby Brown) attract new clients to the Park.

Numbers attending specialist events including Pedal the Park, the multiclass regatta increase with 300 taking part in Pedal the Park. This year also saw our inaugural charity run, "Bog Stomp" take place at the Greenock Cut Centre. 56 paying "bog stompers" signed up to participate. Our first Para sport Festival in partnership with Scottish Disability Sport attracted 65 disabled people from all over Scotland who took part in full day of sport.

The numbers of participants taking part in Duke of Edinburgh activities within the Park this year reaches 2121 with 355, trained, supervised and assessed by Park staff.

The number of participants taking part in the Park's Branching out programme has now risen to 585. These courses for local people with mental health problems continue to show demonstrable improvements for the clients.

Income for Activities was £165,741 a fall of £32,180 and for the Retail and Catering was £167,364 a fall of £8,491 however with a reduction in costs this is the best performance of the retail and catering section to date. Opportunities to increase the income from activities and catering will continue to be pursued.

2.2 Education and Outdoor Learning

Due to the importance that the Curriculum for Excellence has on outdoor learning, the Park continues to be an important facility and is in regular use all year round by local schools and groups. Environmental education sessions were delivered to 5507 people this year from pre-nursery up to secondary and tertiary education.

Just fewer than 9,000 people attended 102 informative Ranger led events. We have worked alongside a number of schools to aid in the schools bids to gain their Eco-Schools awards.

Overall funding for Tag-n-Track of £126,081 was approved through the support of funding from Heritage Lottery Fund and the Greater Renfrewshire and Inverclyde LEADER. The full time Project Officer commenced in January 2017 and a three day a week Assistant was employed in March.

The project is concerned with our environment and encouraging understanding about wildlife and habitats. It is planned to work with the University of the West of Scotland Paisley, SRUC Auchincruive and Glasgow University to enable student projects using GIS data and to publish scientific research. Tag-n-Track team will develop and promote activities for schools, volunteers and events as well as creating online communication and interpretation resources. The project will demonstrate the importance of wildlife on our doorstep and the wider countryside.

2.3 Environmental Management

In total 42 habitat surveys and monitoring took place, data from which was fed into appropriate national survey databanks including Butterfly, bumblebee and wetland birds.

The conservation volunteers provided 4696 hours (2.9Fte) of valuable work, activities included; creating more wood spirits to add to the growing collection on the Shielhill Glen Nature Trail, drystone dyking, repairing paths and fences, planting wildflowers and trees and general tree maintenance at Muirshiel.

The Castle Semple volunteers were also successful in gaining £10,000 from the Tesco's Bags of Help/Groundwork UK Grants Initiative to create a wildlife pond and access path at Muirshiel Country Park.

Water Quality testing at Castle Semple Loch continued and chlorophyll-*a* levels at the STW (sewage treatment works) site and at the middle site have had a general trend of lowering since 1998. Although chlorophyll-*a* levels were low during the summer of 2016 there was an exceptionally high summer maximum level of $59\mu gl^{-1}$ while the STW site maximum was $28\mu gl^{-1}$. Taking the middle site as representative of conditions in Castle Semple Loch the result suggests that the loch is within the eutrophic range.

2.4 Management

The Park delivered a saving of £13,714 on its budget. This taking the Park reserves to £80,607.

Ехропанато		
	2015-16	2016-17
Employee Costs	809,781	726,242
Property Costs	45,809	42,533
Supplies and Services	197,786	168,205
Contractors	17,201	19,720
Transport and Plant	49,567	40,092
Admin Costs	85,954	71,855
Payments to other	1,600	1,820
Bodies		
Total	1,207,698	1,070,467

Expenditure

Income

	2015-16	2016-17
Grants	15,339	(14,115)
Sales Fees &	(199,025)	(165,741)
Charges		
Retail & Catering	(175,855)	(167,364)
Miscellaneous	(56,505	44,161
Requisition from	(808,100)	(692,800)
member authorities		
Total	1,254,824	1,084,181
(Surplus)/ Deficit	(47,126)	13,714

These figures show a reduction in cost per visitor from £1.60 in 2014/2015 to \pounds 1.24 in 2015/2016 to \pounds 0.99 in 2016/17.

Marketing activities took place throughout the year and the Park website is now mobile enabled, with activities and events bookable online. New equipment and events have provided additional media coverage and new audience awareness for the Regional Park.

Health and Safety

There was one RIDDOR reportable incident during this year. 24 members of staff attended 7 Health and Safety training courses.

3.0 Proud Moments

Proud Moments of 2016

Visitor Figures Increase by 44 464 to 694 129	Rangers Delivered 5507 environmental education sessions	Outdoor Activities 6398 places = £165k income	
Funding success bringing in £136k to the Regional Park	bringing inCost = less£136kthan £1		
Expeditions for 2121 kids on Duke of Edinburgh Award	Health Walk initiatives delivered to 1524 participants	51 do inaugural 10km Trail Challenge the Bog Stomp at Greenock Cut Visitor Centre	
42 habitat surveys & monitoring activities done	Numbers Double to 300 cyclists doing Pedal the Park 100k Sportive	585 participant days in the Branching Out Mental Health Recovery Programme	
94 Ranger Events to 8798 users	Corporate engagement days with: Diageo , Cal Mac, M&S, Insight Vacations	Hosted our first Parasport Festival at Castle Semple Visitor Centre	

4.0 Leisure Activity and Health

4.1 Outdoor leisure activities will be resourced and developed in line with market demand.

- 4.1.1 Maintain standards for related governing body accreditation. Clyde Muirshiel Park gained Adventure Activity Licencing (AALA) Accreditation, Royal Yachting Association (RYA) Accreditation and British Canoe Union (BCU) Accreditation.
- 4.1.2 Provide for Duke of Edinburgh Awards (DofE). Duke of Edinburgh activities continue to increase in the Park with experiences for 2121 participants, of these Park staff directly provided training, supervision and assessment for 355 clients. Various expeditions took place including mountain biking and sailing expeditions. We also under the banner of our RYA accessibility centre status organised and ran a sailing expedition for clients with additional support needs.
- 4.1.3 Develop accessibility within the Park and its activities. 2016/17 saw another increase in clients with disabilities. New routes for the hand cycles and trikes were introduced to get riders who are getting fitter access to longer routes. New off-road cycle routes are being assessed in particular around Greenock Cut & Muirshiel mine track. Improvements to sailing and paddle sports are also being progress to ensure we continue to be at the forefront of accessible sport in this area.
- 4.1.4 Develop cycling within the Park and surrounding area. Cycling development within the Park took on many forms this year. The Big Bike Revival days in partnership with Cycling Scotland generated new members for Ride 63 and helped people from the local to get involved in both leisure and commuting activity.
- 4.1.5 *Provide certified activity courses for the public.* A variety of certified coaching courses ran in sailing, powerboat and paddle sports for 344 participants.
- 4.1.6 Provide bespoke courses for client organisations We provided 5699 spaces for clients form groups who have asked for tailor made programmes this includes mainstream schools, ASN schools and various adult and junior care and support services.
- 4.1.7 Develop/ provide specialist activity days.

This year was the second year that we have provided mass participation events for both Scottish Disability Sport and Spinal Injuries Scotland. Both days were hugely successful with people coming from all over Scotland to take part in accessible sport, have discussions with support services and find out from sport governing bodies how to take part in their local area. Scottish Disability Sport had a video of the day made which can be seen at <u>https://www.youtube.com/watch?v=g7mZ9jhXK6Y</u>

4.1.8 Develop/ provide specialist events.

Our specialist events included Pedal the Park Sportive which is growing year on year; a 10km Inverceyde run called the 'Bog Stomp' was a first in 2016.

4.2 The Park will continue to work with health services to facilitate health improvement activities.

- 4.2.1 Facilitate volunteering opportunities with community care groups. Park staff worked with Community Networks Adult Assisted Needs Group who volunteered 17 times at Muirshiel Country Park providing 347hrs of volunteering and contributing to over a dozen projects.
- 4.2.2 Facilitate Health walk programmes.

The health walk programmes provided 58 walks with a total of just under 1000 participants. These include the Inverclyde Health walking group made up of retired Inverclyde residents who undertake a Ranger led walk once a month within the Park for up to three hours.

The health walk programmes provided walks for a total of 1524 participants.

4.2.3 Develop and deliver ecotherapy programmes.

The number participating in our Branching Out mental health recovery programme has now risen to 585. We ran 2 programmes this year at the Greenock Cut Visitor Centre, one in the autumn of 2016 the other in the spring of 2017 and a further two autumn programmes at Muirshiel Country Park. The Park Ranger's success with Branching Out led to them being invited to the National Trusts Culzean Castle to introduce the staff there to the Branching Out programme.

4.3 **Maximise income generation via commercial activity.**

4.3.1 Overall numbers participating in activities were slightly down however there were rises in some areas. See fig below

	2014/15	2015/16	2016/17
Mainstream Taster/multi activity course places	1948	1120	1135
Additional Support Needs (ASN) Junior taster/multi activity places	2085	2545	2099
ASN Adult taster/multi activity places	274	956	1174
Mainstream school multi activity places	829	1238	860
Places on the accessible powerboat	201	470	431
Duke of Edinburgh provision	0	377	355
Coaching course places across all disciplines	571	295	344
Total places provided	5908	7001	6398

4.3.2 Retail/Catering

Income to retail and catering fell this year from $\pounds 175,855$ to $\pounds 167,364$ a fall of $\pounds 8,471$. However in real terms the Retail/Catering has had its best year to

date. By reducing costs and increasing margins the profit from this year is £15,708. This is the gross profit net of staff costs, all purchases and equipment leases. See fig below.

Income Year	Salaries	Spend	Income	Deficit (+)/ Surplus (-)
2012/13	103498	82499	173871	12076
2013/14	101448	80763	170287	11924
2014/15	97553	91297	171916	16934
2015/16	93615	78967	175855	-3273
2016/17	86,165	62199	167364	-15,708

5.0 Education and Outdoor Learning

5.1 **Promote the Park as a platform for outdoor learning**

5.1.1 Facilitate school, college and university visits

Park staff provided 123 educational sessions over 81 days at the Greenock Cut Visitor Centre and Lunderston Bay which were delivered to 2086 students and staff predominantly from Inverclyde; however there were also visits from schools within Renfrewshire, Argyll and Bute and Glasgow. At Castle Semple and Muirshiel centres Ranger staff led 102 school visits, delivered to 3129 pupils and 14 college/university groups with 106 participants.

5.1.2 Raise awareness of the Park and its resources through marketing and promotion via professional networks.
One of the Parks Senior Rangers has been elected to sit on the Scottish Countryside Ranger Association Council which is working on promoting increasing levels of partnership between the South West Scotland Regional Ranger Services. The Park played host to the Loch Lomond Ranger team, who were given a guided tour and workshops, in return our staff visited Loch Lomond and Trossachs National Park benefiting from both networking opportunities.

5.2 Deliver, monitor and review a programme of informative events for visitors of all ages, linking into curriculum outcomes where appropriate.

5.2.1 Deliver learning activities to groups, including schools, youth organisations and summer groups.

Park staff delivered environmental education sessions to 5507 clients. These sessions ranged from basic pond dipping and rock pooling sessions with nursery pupils, introduction to food chains and mini-beast surveys with primary schools to bush craft skill and potamology (river studies) with secondary school pupils. A breakdown can be seen in the table below.

Type of group	Numbers undertaking learning activities at GCVC& LB	Numbers undertaking learning activities at MCP & CSCP
School - Nursery	319	193
School - Primary	2288	1526
School - Secondary	471	217
School - College	0	100
Adult Group	43	131
Youth Group	46	48
Total	3167	2215

Sessions for the most part are delivered within the Park, but outreach work is undertaken and some sessions are delivered within the community or within schools.

5.2.2 Establish clear links between educational activity and Curriculum for Excellence (CfE).

Working alongside teachers, staff have developed the educational visits in such a way that they cover numerous sections within the CfE. While it might be obvious that a visit would entail links to the sciences they also connect to a variety of CfE outcomes from across the curriculum. See appendix 1

5.3 Use the Park's digital resources to maximise the scope for learning.

5.3.1 Maintain the Park's online profile, expanding reach where possible.

Two high school sessions making use of the extensive digital image archives were delivered. The first was for art and design students who had a project to create Park themed tourism posters, staff delivered a talk about the kinds of activities visitors engage in when visiting the Park as well as highlighting the flora and fauna found within CMRP.

The second visit again made use of the digital images to promote the Park to a Renfrewshire High School as part of a teachers "in service" day. The visit for the in service day resulted in the High School sending 2 coaches of pupils to the Park and an art exhibition displaying the tourism posters at the Greenock Cut Visitor Centre.

The "easy" to use digital cameras provide an ideal learning opportunity for all ages to learn how to compose good images whether it was natural history, landscape or portrait based to the recording of projects on the ground used as evidence when applying for John Muir Award certification.

5.3.2 Provide a contemporary suite of accessible digital information.

A mobile enabled website was developed during the year, in 2017 courses and events will be booked online on the first time. Social media activities on Facebook and Twitter continue and have expanded to Instagram to increase reach.

The mobile enabled website allows more information to be easily viewable, as new resources are developed; content is being made available online examples of this include the Conservation Volunteer Programme, Complaints Policy and What's on Guides.

6.0 Environmental Management

6.1 Enhance the Park's natural heritage whilst safeguarding key species, habitats and landscape character.

6.1.1 Deliver a comprehensive regime of inspections and maintenance whilst undertaking and contributing to environmental surveys and information gathering exercises.

Weekly, monthly and quarterly inspections continue to take place at all the of the visitor centres within the Park to make sure that we are complying with H&S legislation.

Rangers undertake year round biological surveys and submit their findings to national data bases to help monitor ecological trends. Surveys include birds, butterflies, dragonflies, reptiles and vegetation.

6.1.2 Manage conservation volunteering activity.

The Greenock Cut Visitor Centre volunteers have formed their own constituted group. "The Greenock Cut Conservation Volunteers" which has opened up the potential to apply for funding. The groups work plan is still designed and overseen by the ranger service.

The Greenock Group was nominated for Volunteer Team of the year 2016 in the recent Inverclyde Volunteer Awards and was successful in winning. The group voted to spend prize money on buying power tools to complement the existing tools at the Greenock Cut Visitor Centre.

The Castle Semple Conservation volunteer group has been constituted for several years now and has successfully applied for several grants enabling work to be carried out which would probably not have taken place due to lack of funds.

6.1.3 Undertake local conservation projects and input to regional schemes where appropriate.

Rangers and volunteers continue to provide data to the Marine Conservation Society for the EUs "Marine Strategy Framework Directive". The MSFD Requires that Member States take measures to achieve or maintain Good Marine Environmental Status, as part of the monitoring sea debris is recorded at regular intervals at Lunderston Bay and reported to the Marine Conservation Society who then in turn present the data in a report which is submitted to the UK government and EU.

6.1.4 Engage staff in training and CPD opportunities to maintain and improve upon skill level.

Staff are encouraged to look for and apply for training they deem appropriate to the tasks they undertake as part of their job role. Training included updates in First Aid and use of chainsaws

6.1.5 Seek funding for environmental management projects.

Funding of £39,987 was secured from LEADER Greater Renfrewshire and Inverclyde towards the previously granted funding from Heritage Lottery Fund (£66,100) for the Tag-n-Track Project.

6.1.6 Water Quality

The 5 year running mean for total phosphate (TP) at the STW site (1998-2016) has indicated an increase in amounts by 43% since 2012. Although, it may be expected that there would be an associated increase in chlorophyll-a there has been a reduction in most years for this parameter at the STW site since 1998.

There have been increasing levels phosphate at the STW site along with higher levels of nitrate and ammonia. Although, nitrates at the STW site have increased a small amount recently the overall trend has revealed a lowering of levels at both sites. However, ammonia levels at the STW site are, on occasion, potentially anoxic to fish (>0.07mgl⁻¹) particularly those with a high oxygen demand such as pike.

Suspended solids at the STW site have been elevated since 2012, while for both sites levels of silicate, B.O.D, pH, alkalinity and conductivity have remained steady. Values for chloride have been variable but have remained similar at each. Increasing amounts of the above parameters are likely to be associated with poorer water quality.

Previous reductions in phosphates and nitrates may have been related to improved processing at the sewage treatment works. However, the lowering of TP levels at the STW site may have been due to macrophyte growth stabilising sediments, assisting the reduction of algal levels through competition for nutrients and plant cover providing a refuge for algae consuming zooplankton.

Water chemistry levels at the middle site have not varied significantly since the inception of monitoring.

Recent work by SNH has indicated that due to the high percentage of the invasive species *Elodea nutalli* Castle Semple Loch is categorised as being in an unfavourable condition.

It has been demonstrated that a general macrophyte concentration in a loch of 15-20 percent is associated with lower phytoplankton levels. Ideally, Castle Semple Loch requires a more diverse macrophyte population and for this to be more broadly distributed.

Monitoring of the water quality is required to assist the safe operation of water based activities and is also an important determinant of biodiversity. The continued collaboration with University of the West of Scotland and monitoring the site is necessary to determine any actions that may be required to improve water quality and biodiversity.

7.0 Park Management

7.1 Financial Performance Summary

The Park budgets achieved a $\pm 16,035$ surplus for this financial year. This was in the main due to a $\pm 13k$ reduction in insurance and vehicle costs.

7.2 Park Visitor Figures

Since 2012 visitor figures have been reported as the number of visitors per site, as outlined below, this is based on car counter data and observational records. Visitor numbers across the Regional Park have increased, to nearly seven hundred thousand visitors a year.

	2015/16	2016/17	% change
Greenock Cut	77437	80759	+4.3%
Lunderston Bay	215425	217068	+0.8%
Castle Semple	320184	359295	+12.2%
Muirshiel	36419	37007	+1.6%
TOTAL	649 465	694 129	

Social media website marketing

Social Media

Social media channels: Facebook, Twitter and You Tube continue and are used to communicate with Park users and promote Park activities. By March 2017 there were 2200 'likes' on Facebook and 1600 'followers' on Twitter. The videos on You Tube have been viewed over 42,000 times. The Instagram account is a year old and has 400 followers.

Website

The mobile enabled website (www.clydemuirshiel.co.uk) went live in November 2016. In 2016 the website had 4.9 million hits, 87,615 visits by 87,615 unique visitors; this is compared to 158,929 visits by 82,000 visitors respectively in 2015. Trends in visits increase with the seasons, culminating in 15,976 visits in July 2016. The three most viewed pages are: 'Castle Semple', 'Park sites' and 'Things to do'. The 3 most downloaded files are 'Semple Trail Map, the History of Castle Semple Estate and the What's On Winter 2016.

Marketing Activities

Most visits were generated by Google searches and traffic was driven to the site by Facebook predominantly, with Visit Scotland and British Cycling following closely.

Marketing activities took place throughout the year utilising local press, websites, posters, leaflets and social media channels.

New events – such as Pedal the Park and the Bog Stomp had their own marketing plans and created partnership working opportunities, media coverage and new audience awareness for the Regional Park.

New equipment such as the trikes and bellboats created media coverage as the boats where named by Additional Needs Support Schools. Site leaflets have been updated and made available online as well.

The legacy of Race2theGames 2014 continued in 2016 with the creation of the South West Scotland Sailing Team for the Special Olympics being held in Sheffield in August 2017. The team are training at Castle Semple providing various promotional opportunities. Regional Park boats (and staff!) took part in Scotland's Boat Show and the RYA Sailing in the City 2 day event – both generated media coverage and new audience awareness.

The Windows on Wildlife Project Officer Hayley Douglas continued as the 'Wildlife Expert' on STV Glasgow's primetime evening programme 'Live at Five' going out to all of central Scotland. This has provided the Park with a regular television profile focusing primarily on wildlife and conservation activities both within the Regional Park but equally at other locations in Central Scotland.

7.3 Health and Safety

The Park management continues to work to align Health and Safety policy and practices more closely with those of Renfrewshire Council, the servicing authority. Seven Health and Safety training courses were attended by 24 members of staff.

There was one RIDDOR reportable accident to a member of staff when he fell and injured his back resulting in him being off work for 10 days.

Otherwise accident rates in the Park remain low with only minor injuries.

Eighteen injuries to visitors were recorded and these were mainly from falls when cycling in the Park. One injury to a member of the public's finger was due to a dog bite while trying to separate two dogs that were fighting. These figures are very low given the 694,129 visits annually to the Park and the range of activities taking place.

2015 2016 Team 2013 2014 1.43 1.2 1.8 Management 3.1 *5.29 *4.8 Administration 6.5* 6.5* 7.02 7.0 Ranger 10.5 7.26 5.81 6.5 Activities 5.1 6.3 5.75 5.75 Visitor Services 7.2 6.55 2 2.18 Estates 3 2.65 3.07 2.95 Cleaning 3.18 3.57 30.55 30.20 Total 38.38 34.63

7.4 Staffing

The staff totals (in Full Time Equivalents, FTE) for each team were:-

*Includes the countryside officer and technical assistant.

We also have 0.25 FTE Project Officer on the tag and track project.

7.5 Feedback and complaints

Feedback is received in many forms including social media channels, forms and thank you letters. Public profiles on Trip Advisor (TA) for each Park site and the Regional Park gives feedback as well.

Written complaints for the period are:

Castle Semple		
Japanese Knotweed	2	
Potholes	1	
Dogs in Café	1	
Café coffee price	1	(TA)
Muirshiel		
Responsible Access Issue – re Wild Camping	1	
Quality of Coffee	1	(TA)
Potholes & poor trails	1	(TA)
Greenock Cut		
Maintenance Issue – Lack of Lighting	1	
Responsible Access – Trail Bikes	1	
Customer Service Issue	1	(TA)
Lunderston Bay		
Speed of some cyclists on cycle track	2	
Car Park Yellow Hatching Issue	1	
Responsible Dog Walker Issue	1	(TA)
Barnbrock		
Campsite cleanliness	1	
North Ayrshire		
Responsible Access – Lambing	1	

Clyde Muirshiel Regional Park Ranger Service Environmental Education Pack



Year Group : Second Level

Curriculum for Excellence: Numeracy and Mathematics/Shape, Position and Movement

Lesson Theme: Mapping Skills

Main Curriculum Experiences and Outcomes:

• Through practical activities which include the use of technology, I have developed my understanding of the link between compass points and angles and can describe, follow and record direction, routes and journeys using appropriate vocabulary. MTH 2-17c

Time:

- Having investigated where, why and how scale is used and expressed, I can apply my understanding to interpret simple models, maps and plans. MTH 2-17d
- I can use my knowledge of the coordinate system to plot and describe the location of a point on a grid. MTH 2-18a
- I have carried out investigations and surveys, devising and using a variety of methods to gather information and have worked with others to collate, organise and communicate the results in an appropriate way MNU 2-20b

Lesson Overview:

Through a Ranger led walk learners will have the opportunity to learn various aspects of mapping.

Learners will understand how something very big can be meaningfully represented by something very small i.e. a globe, or map. They will understand that more information is available as scale increases and that basic grid references can help identify a location.

Learners will find out that pictures can be used to express ideas and convey information. The compass directions will be looked at and learners will find out how these directions are fixed and when represented on a map can be used to aid direction and alignment. Fun games and activities will help reinforce learning. **Suggested Learning Activities:** A combination of the following

Ranger led guided walk:

Exploring various focal points of the park which can be found on the map.

Treasure Hunt:

Basic introduction to map reading with a fun treasure hunt.

North, South East and West: A fun energetic run around game which aids in

reinforcing the four main compass directions.

Build a Map:

Introduction to basic map building through expressive art and use of natural materials.

Achieving the Four Capacities		
Successful Learners	Confident Individuals	
Think creatively and independently.	Relate to others and manage themselves.	
Learn independently and as part of a group.	Pursue a healthy and active lifestyle.	
Make reasoned evaluations.	Be self-aware.	
Link and apply different kinds of learning in new situations.	Develop and communicate their own beliefs and view of the world.	
	Assess risk and make informed decisions.	
	Achieve success in different areas of activity.	
Responsible Citizens	Effective Contributors	
Develop knowledge and understanding of the	Communicate in different ways and in different	
world and Scotland's Place in it.	settings.	
Make informed choices and decisions	Work in partnerships and in teams.	
Develop informed, ethical views of complex	Take the initiative and lead.	
issues.	Solve problems	
Clyde Muirshiel Regional Park Ranger Service Environmental Education Pack		
Cross-Curriculum Links - Second level. Lesson	Theme - Mapping Skills	

