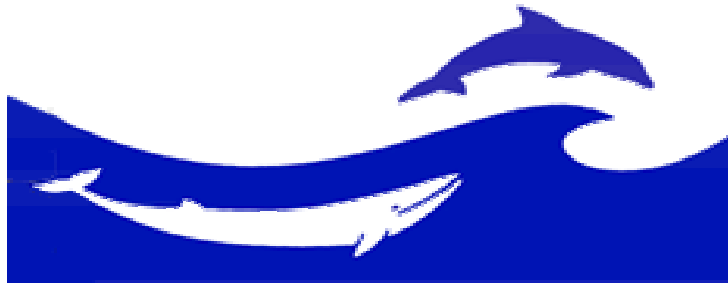


Hebridean Whale And Dolphin Trust



NÁDAIR I Marine Outreach Project 28 Final Report January 2005



NÀDAIR

(Nature and Sustainable Development in the Argyll Islands)

In 2000, the NÀDAIR Trust (Nature and Sustainable Development in the Argyll Islands) secured Heritage Lottery funding for 32 individual heritage-based projects throughout the Argyll islands. All the projects focused on the sustainable development of the outstanding natural, archaeological, historical, cultural and geological interest of the Argyll islands, whilst protecting existing jobs and creating new employment opportunities.

HWDT contributed three projects as part of the NÀDAIR programme and these three projects have been the basis of most of HWDT's activities since their commencement:

NÀDAIR Project 5: Marine Interpretation and Education Project

NÀDAIR Project 28: Marine Life Monitoring and Marine Outreach Project

NÀDAIR Project 29: Community Sea Life Sightings Project

These three projects were primarily funded by the Heritage Lottery Fund, with additional funding from Scottish Natural Heritage and Argyll and the Islands Enterprise.

Supported by the
Heritage Lottery Fund



These three-year projects began in September 2001 and were completed in November 2004. This report summarizes the achievements and outcomes of project 28.

Overall Aims of Projects

- To raise public awareness, through education and communication, about the presence of whales and dolphins in the Hebrides and the threats that they face.
- To conduct benign research into cetaceans, their environment and associated species and to disseminate the results of this research to the public and relevant organisations.
- To promote the sustainable use of the Hebridean marine environment.
- To work within and support the local economy of the Hebrides through sustainable ecotourism, education/training and job opportunities, and to encourage stewardship of the marine environment.

Marine Outreach Programme

NÀDAIR Project 28

Background



The coastal waters of the Argyll Islands, warmed by the North Atlantic Drift, are one of the most important and productive marine habitats as well as being some of the least polluted waters in Europe. The transition from southern warmer waters to northern cooler waters is reflected in the mixture of marine species. 19 species of whales and dolphins have been recorded in Argyll waters as well as two species of seal, otters and basking sharks. These animals are all species needing conservation under both UK and European law. Despite the fact that Argyll is arguably one of the most important habitats for marine mammals and basking sharks in the UK, little is known about their distribution and status. There is no information even on exactly how many whales and dolphins inhabit Argyll waters, despite their importance as a resource to the Argyll tourism industry or their conservation status.

As well as important marine species, there is a wide variety of marine habitats of international importance from rocky reefs, turbulent tidal streams, sand and gravel beds to deep water channels. The coastal landscape on the islands varies dramatically, from the sheer cliffs of Scarba to the long stretches of sandy beaches on Tiree, the high sand dunes of Coll, to the raised beaches on the west of Jura and the exposed coast of Colonsay and Oronsay. There is a need to raise the awareness of the importance of maintaining this rich diversity for not only the marine life but for the communities which rely on it as an essential resource. How people use the sea, the significance of the waters connecting the Argyll islands – and the wildlife it is home to - has changed significantly over the past 50 – 100 years.

The Marine Outreach programme aims were two-fold:

- To investigate the range, distribution and relative abundance of selected marine species found in Argyll waters and to use this information to promote their protection and conservation (**Marine Life Monitoring**).
- To raise awareness of the rich marine and coastal bio-diversity and the importance of its conservation through education and communication thereby helping to protect it for future generations and for those who make a living from the seas (**Education Outreach**).

This project dovetailed with the Marine Education and Interpretation Project (NÀDAIR project 5) which helped to provide materials and information geared towards the Scottish school curriculum that are communicated to all the islands and the Community Sea Life Sightings Project (NÀDAIR project 29) that promoted the reporting of marine life sightings by marine life operators and local island and coastal communities.

Outcomes and Achievements

Table 1. Summary of the projected and completed outputs for Project 28

Category	Projected Project 28 Outputs	Completed Outputs
Boat		
	Purchase & Equip Boat	<i>Silurian</i> & equipment purchased
Jobs		
	Jobs Created: 2 full time, 1 part time paid positions	4 full time, 2 part-time paid positions
	Jobs Protected: 1 full time job protected & 1 part time	1 full-time & 1 part-time
Islands visited		
	25 island ports & harbours annually	25+ island ports & harbours annually
	15 associated mainland ports annually	15+ associated mainland ports annually
Talks		
	10 Public talks annually	30 public talks
	28 Community group talks	29 community talks
	Talks to 100 pre-school children	120 pre school children
	56 groups visiting boat annually	200 groups visited boat
Education & Training		
	10 Marine Awareness Courses	10 marine awareness courses
	Distribute Marine Heritage Literature	Marine Heritage Literature distributed throughout Argyll
	200 youths / unemployed trained	130 boat volunteers 70 Centre volunteers trained on boat
Press & Visits		
	3 Press Boat Trips	3 Press Boat Trips
	12 individual Journalists Boat Trips	14 journalists
	20 Information Visits made	21 information visits
	500+ Public Enquiries	Handled 1000+ enquiries
Schools visited		
	19 island schools 2x over 3 yr period (38 in total)	38 Argyll island schools
	15 coastal schools over 3 yr period	25 coastal schools
	8 island pre-school classes (24 in total)	24 pre-school groups
	4 Gaelic medium units 2x over 3 year period (8 total)	8 visits to Gaelic units
	3 special needs schools 2x over 3 year period (9 total)	10 special needs groups
Marine Surveys		
	45 Marine Sightings Surveys per year (135 total)	240+ days of dedicated marine sightings surveys
Progress & Monitoring		
	2 Progress Reports	2 Progress Reports (This is the 2 nd one)
	Monitoring - 12 Focus Groups; 3 Surveys	2 Focus groups (April/may) Sea Watch training Course Ferry Surveys (18 crossings) 2 winter surveys on board Ecocruz.

BOAT



At the beginning of this project, HWDT purchased a 65 ft ketch-rigged yacht, *Silurian*, previously seen in the BBC TV series *The Blue Planet*. The *Silurian* was an ideal platform to survey the range, abundance and distribution of selected marine species in Argyll waters (Marine Life Monitoring) and to reach the many widespread and often remote communities of the Argyll islands to promote awareness of the marine environment (Education Outreach). *Silurian* was furnished with all the necessary tools to do the marine life monitoring work such as acoustic equipment, GPS and binoculars and also fully equipped to become a "virtual

floating classroom" that was able to reach all the islands as an appropriate and exciting display facility.

JOBS

Five members of staff were directly responsible for the marine outreach project: a Marine Ranger, an Education Officer, an Education Assistant and the Skipper and First Mate of the *Silurian*. The Marine Ranger was responsible for overseeing the marine life monitoring work, the education officer and assistant responsible for overseeing the education outreach work and the skipper and first mate were responsible for all aspects concerning the boat. These five staff worked closely together (Marine Outreach Team) along with the executive director of HWDT to fulfil the aims, objectives and outputs of the project.

ISLANDS VISITED

The area covered in the marine outreach project consisted of Argyll and its associated islands (see map to the right). The education outreach and marine life monitoring work undertaken by *Silurian* and her crew were generally carried out on separate trips. In the education outreach trips, school children from the Argyll islands and some coastal mainland schools would come aboard the 'floating classroom' for workshops and lessons. In the marine life monitoring trips the waters surrounding the Argyll Islands were surveyed for selected marine species. Both the Education Outreach and Marine Life Monitoring work will be described in detail later in this report. During the course of the project for both the marine life monitoring and education outreach trips, *Silurian* and her crew visited more than 25 harbours and ports within the Argyll islands and more than 15 associated mainland ports annually.



Students from Luig learning about plankton on board *Silurian*



Map of the West Coast of Scotland with the Argyll Islands highlighted in green

PUBLIC TALKS, EVENTS & FORUMS



HWDT Education Officer Caroline Lathe giving a talk to local school children

Aside from school visits, many different public talks and events were held over the course of the project. During the first year of the project open evenings on *Silurian* were held on a number of the Argyll islands (Mull, Islay, Coll & Tiree) in conjunction with the education and monitoring trips to introduce the project, *Silurian* and her crew to the local island communities. During these open evenings presentations were given



about the Argyll Marine environment as well as specific information about the HWDT NÀDAIR projects themselves. These were part of the 30 public talks, 29 community talks and talks to approximately 120 pre-school children that were held both on the islands and mainland for local and community groups. Other topics covered for these talks included: the marine life of Argyll, whales & dolphins of the Hebrides, marine pollution and conservation issues. When *Silurian* was at mainland and coastal harbours over the course of the project, approximately 200 groups were welcomed on board the boat to learn more about the project, HWDT, the marine life of Argyll and the importance of its conservation.

Additionally, HWDT has participated in a number of different forums including: Hebridean Marine National Park Partnership (Committee Member), Argyll Biodiversity Forum (Partner), Firth of Lorn SAC Management Forum (Advisor) and the Land & Sea Forum (Member).

PRESS & VISITS

There have been 3 press boat trips over the course of the project. These have included a BBC trip to St. Kilda to film an episode of "Bill Oddie goes Wild" that had an estimated audience of 3 million, a BBC Scotland interview with coverage of NÀDAIR AGM with an estimated audience of 9 million and filming with Splashdown productions for the HWDT video. 14 individual journalists have joined boat trips over the course of the project for various publications and organisations.

Information about the project and boat has been made readily available throughout the project. This includes open information visits for the general public as well as addressing individual public enquiries. A total of 21 information visits to the boat and over 1000 public enquires have been handled. The information visits have included: 3 open days on Mull, open evenings held on many of the islands and the Argyll & Bute Regional Environmental Fair (ABREEF) 2003 opening evening.

EDUCATION & TRAINING

During every trip, in addition to three core crew (skipper, 1st mate and marine ranger or education officer) HWDT have been assisted in the project work by volunteer crew.

Each monitoring trip included five volunteer 'trainee observers'. These observers were usually undergraduate students seeking field experience in survey techniques, marine mammal science and marine biology. At the beginning of each trip all the volunteers were trained in species identification, familiarisation with underwater sounds, survey methods, protocols and data collection and climbing to the crows nest! Throughout the monitoring trip all are involved in observation watches, and data collection and recording. All volunteers are also involved in the sailing of the *Silurian* and the domestic chores.



Volunteer 'trainee' monitoring the acoustic systems during a monitoring trip on board *Silurian*



Volunteer 'trainees' on observation watches



Volunteer working with a student on board *Silurian*

On each education outreach trip 2 – 4 volunteers assisted in the education project work. These volunteers ranged from undergraduate students seeking practical education experience to retired teachers and professionals. The volunteers were given an overview of the workshops / lessons to be given during that trip and provided with materials and textbooks for further reading. The tasks assigned to each volunteer during the school visit would depend on the background, skills and interests of each individual volunteer. These would include: working with the children individually to catch and identify plankton, showcase items from the touch tank and generally be an extra helping hand to answer questions and provide additional assistance when needed.

During the course of the project there have been approximately 200 volunteers trained on the boat. Approximately 130 of those came just for the education / monitoring trip while the other 70 were volunteers from the centre who also received training on the boat.

HWDT has also collaborated with Millport Marine Station in providing 3 days of marine mammal survey training each year for students attending their marine mammal course.



Education Outreach

SCHOOL VISITS

NOTE: THIS REPORT DETAILS SCHOOL VISITS PRIMARILY UNDERTAKEN IN PROJECT 28 (FOR ADDITIONAL SCHOOLS VISITED UNDER NÁDAIR SEE PROJECT 5 FINAL REPORT)



Hands on learning with the Touch Tank



A lesson on navigation on the West Coast of Scotland



Listening to underwater sounds with the hydrophone

One of the key activities of the Marine Outreach Project was the programme of school visits on the *Silurian*. This programme was developed in conjunction with the staff of Scottish Natural Heritage (SNH), local authorities and island teachers, so that the visits fit in with the Scottish school curriculum and governmental objectives for marine environmental conservation and education.

Resources

Silurian has a wide variety of educational resources on board for use during school visits and educational workshops. One of the most useful has been the touch tank, a large plastic tub that was filled before each school visit with a variety of Hebridean marine life (make-shift aquarium). On a good day, it contained several crab species, a lobster, a fish, starfish, mussels, limpets, anemones and seaweed. The contents depended on the catch of the *Silurian's* creel pot and the generosity of local fishermen. The touch tank gave the children the opportunity to learn about these marine animals and plants first hand. The boat also carries plankton nets and a set of microscopes that were used by the students to catch and view plankton and microscopic life forms collected whilst on board. The boat is equipped with a range of IT resources where videos of marine life or recordings of vocalisations made by cetaceans were viewed and which was linked up to other sites when further information was needed. Additionally, the navigation instruments (such as compass and radar) and charts and marine life monitoring equipment such as the hydrophone also proved very useful educational tools.

Primary School Visits

Between September 2002 and November 2004, primary schools from the Argyll islands (Mull, Iona, Jura, Tiree, Coll, Islay, Gigha, Colonsay, and Lismore) were welcomed aboard the *Silurian* (see Table 2). During each visit the *Silurian*, with its crew of skipper, first mate, education officer and volunteers, would moor alongside the local pier/pontoon and up to fourteen children were then brought on board for a visit. On the day preceding the children's visit to the *Silurian*, the Marine Education Officer gave an introductory talk at each school involved. This talk set the scene for the visit to the boat and was also an opportunity to go over important safety aspects with the children. During these visits many of the

Table 2. Argyll Island Primary Schools Visited during Education Outreach (Project 28)

School	Island	Dates
Arinagour primary	Coll	Sept 2002
		June 2004
Bunessan Primary	Mull	June 2003
Bowmore Primary	Islay	June 2003
		Aug 2003
		Sept 2003
		May 2004
Kilchatten Primary	Colonsay	Oct 2003
		June 2004
Dervaig Primary	Mull	Mar 2003
Gigha Primary	Gigha	Oct 2003
Iona Primary	Iona	June 2003
Kiells Primary	Islay	Oct 2003
Lismore Primary	Lismore	Nov 2002
		Oct 2004
Lochdonhead Primary	Mull	Apr 2003
		Sept 2004
Luing Primary	Luing	June 2004
Port Charlotte Primary	Islay	June 2003
Port Ellen Primary	Islay	Apr / May 2003
Salen Primary	Mull	Sept 2002
		Aug 2004
Salen Primary Gaelic Unit	Salen	Apr 2004
		May 2004
Small Isles Primary	Jura	Apr 2003
Tobermory Primary	Mull	Nov 2002
		June 2004
		Sept 2004
Tiree Primary	Tiree	Sept 2002
		June 2004
Tobermory Pre-primary	Mull	Apr 2004
Ulva Ferry Primary	Ulva	May 2003
		August 2004

Table 3. Secondary Schools visited during Project 28

School	Island	Dates
Islay High	Islay	June 2004
Tiree High	Tiree	June 2004
Tobermory High	Mull	June 2004

educational resources made available through project 5 were utilised such as the display boards of Hebridean cetaceans and biology and the life size inflatable, minke whale and dolphin.

The next day the students would be brought in small groups on board the *Silurian*. They would be given an introduction to the boat and the crew followed by a series of small workshops on various aspects of the boat and marine life. These were directly related to topics on the national curriculum for Scotland such as the diversity of life, communication or adaptations of living things to their environment.

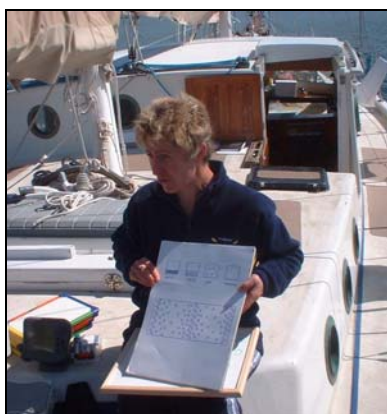
Using the hydrophone, the children listened to the underwater sounds at the pier. Following this activity, they listen to, and learn to identify recorded vocalizations of whales, dolphins and porpoises. For most of the time aboard, the children were split into two groups, to ease supervision and to optimize the use of the boat's small spaces. It was possible though to fit (at a squeeze) groups of fourteen children around the table in the saloon. The children got together in the saloon to make shapes of marine animals (or plants) using salt dough, to discuss an Admiralty chart of the Hebrides, to see a baleen plate and a whale tooth and to have a juice or lunch break.

Since the start of September 2002, over 500 children have participated in HWDT's Marine Outreach Project. At the smaller primary schools such as Lismore and Gigha, all the children came aboard in one day. At Arinagour (Coll) and Tobermory, children were aboard over two days. At the other primary schools, such as Tiree, Kiells (Islay), and Salen (Mull), it took three days to accommodate the larger numbers of children. Finally, at Bowmore (Islay) two separate trips were needed to bring all the children aboard.

Secondary School Visits



Biological adaptations of a starfish



On board Physics lesson



Learning about the physics of whale & dolphin sounds

In 2004, the programme of school visits was expanded to include all of the Argyll islands secondary schools (see table 3). The material presented during these visits was tailored to the topics being covered by each class visited. At Islay and Tiree high school, physics and biology classes were brought on board *Silurian*. For the physics class a workshop was designed focusing on the physics of sound. The basic principles of sound were covered and then explained in further detail using examples from the marine environment, specifically whale and dolphin vocalisations. Students were able to see real life applications of these principles with the hydrophone and other acoustic equipment used on board during monitoring trips. With the biology classes, the workshops focused on biological adaptations to the marine environment. The marine life collected in the touch tank was used for hands-on discussion of these adaptations. For example, the students were able to compare and contrast the various adaptations of the different crab species in the tank. Additionally, the many whale and dolphin adaptations to the marine environment were also presented through video and sound programs. Tobermory high school visited *Silurian* in small groups for World Oceans Day. These visits were designed to highlight the wealth of marine life present in the waters around them and the importance of their conservation.

Coastal, Gaelic Medium & Special Needs School Visits

Apart from the Argyll Island schools, other schools were visited during the course of the project. These included 25 coastal schools, 8 Gaelic units, 24 pre-school groups and 10 special needs groups.



Visit to a special needs school

Project Monitoring

Following the visit to the Silurian, each school was asked to respond to an evaluation questionnaire. The feedback has been very positive with all the schools saying that the visit was beneficial for their students and fit in well with the curriculum (see the appendix). Suggestions for improvements and additions to the project made by the teachers were taken into consideration. One of the main suggestions was that the project could be improved by having a plenary session in schools following the visit to the Silurian. This plenary session was subsequently added when possible to the school visits in the summer of 2003. Additionally some of the teachers suggested the benefit of additional follow-up resources available on the website. These have been incorporated into the development of HWDTs website.

Feedback was also received from the school children. On the day of the visit, exclamations ranged from “Cool!” and “We want to come back tomorrow!” to “Can I have a job on the boat?” The children also sent thank-you letters and a description of the visit.

ADDITIONAL OUTPUTS FROM EDUCATION OUTREACH PROJECT 28

Educational materials aimed at the upper primary and secondary area have been produced. These resources, as most educational resources, were utilised in both this project and the Marine Education and Interpretation Project (5). Where possible some of the educational materials were produced in Gaelic in order to answer the specific needs of many of the Argyll island children.

HWDT developed many links and contacts with teachers, educators, and community groups over the course of the project. The education officers worked closely together as well and liaised with local teachers and educators in the production of resources. Into HWDTs Website, links to the *Silurian* and more educational pages for teachers and schools were added.

Marine Life Monitoring

MARINE SURVEYS



Aims of marine surveys

- To establish the range of species found in Argyll waters and investigate their distribution.
- To use this information to establish relative abundance of species throughout Argyll waters and identify 'hotspots' of activity.

Methods

During the monitoring trips the following was undertaken:

- Visual observation watches

During these sightings, information of all cetaceans, basking sharks and seals was collected. All environmental condition data was logged and recorded. In addition information was logged about marine litter and boat activity.

- Acoustic monitoring of cetaceans



Hydrophone systems are one of the most important sets of equipment used on board *Silurian* for marine life monitoring. One of the systems used was specially designed to detect and record the high frequency vocalisations of harbour porpoises. Without this system it would be impossible to hear their clicks on a normal hydrophone system since their vocalisations are out of the range of human hearing. The second system was an audio hydrophone which detected all those species vocalising within the human range of hearing e.g. bottlenose dolphin, Risso’s dolphin and the common dolphin. Direct digital recordings were made of all the sounds for analysis and for training and educational purposes.

- Photographic identification work



Close up shot of ‘Holey’, a minke whale in the photo-id catalogue



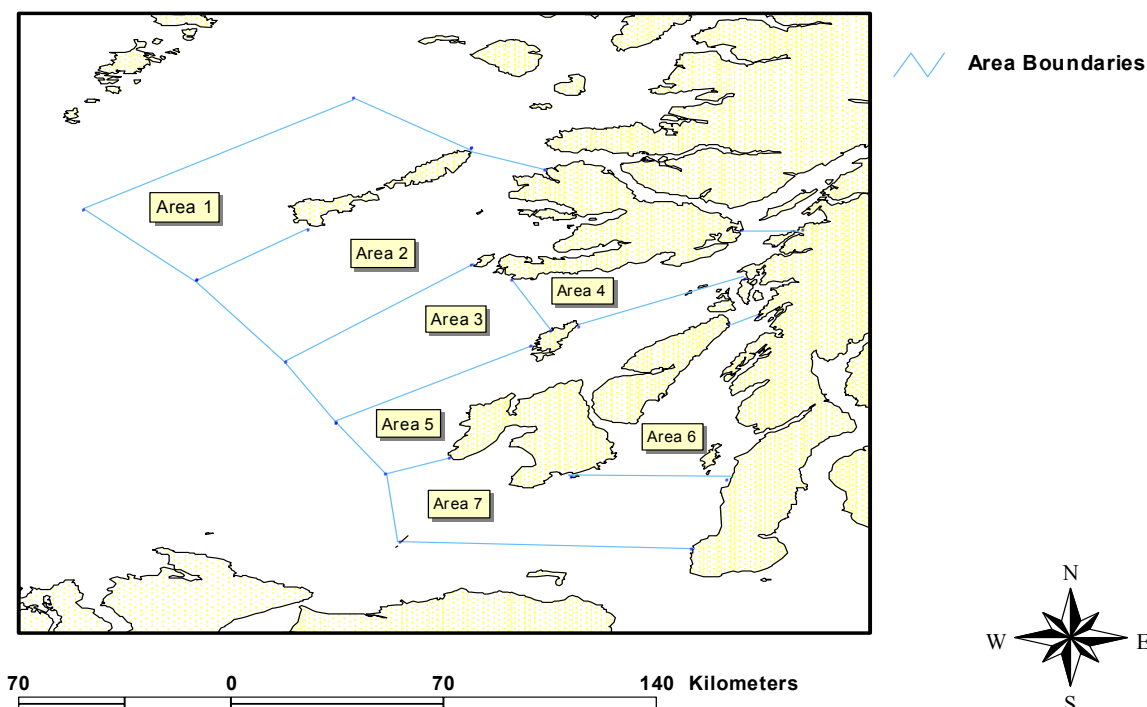
Photo-ID work in action of bottlenose dolphins

The photographic identification (Photo-ID) work focused specifically on the following species: bottlenose dolphins, minke whales, basking shark, killer whales and Risso’s dolphins.

Survey Area

HWDT monitored all Argyll waters from North Mull down to South Islay. The area was divided into seven survey blocks which were surveyed in approximately one day depending on conditions. The monitoring area is defined below.

Survey Areas within Marine Outreach Project





Adult Risso's Dolphin with her calf



Minke Whale spy-hopping



Male and female Orcas off the coast of Iona

Each year of the project from about April to October, *Silurian* spent at least 10 days every month at sea undertaking monitoring surveys throughout the survey area. On average 500 nautical miles was covered per trip, totalling an average of 4000 miles each season. A broad range of species has been sighted including harbour porpoise, bottlenose dolphin, Orca, minke whale, humpback whale, common dolphin, white sided dolphin, Risso's dolphin and basking shark. In addition to this scheduled monitoring work a few winter surveys were also taken in collaboration with EcoCruz (Sea Life Surveys). During monitoring trips, opportunities were also taken to distribute leaflets and flyers around the islands to encourage people to report their sightings. As already discussed, the boat was always open to visitors wanting to find out more.

Results

The results of the marine life monitoring work described above are currently being analysed and compiled. A separate report will be produced detailing all of the findings of the work and data collected over the course of project 28.

Partnerships

HWDT developed several links with external organisations to maximize the capacity in which the data collected during the monitoring trips can be utilised for maximum conservation gain. Below is a summary of HWDT's working partnerships.

- Sea Mammal Research Unit (SMRU) and Dunstaffnage Marine Laboratory (DML)

SMRU and DML are partners in a three year project investigating the distribution of marine mammals on the West Coast in relation to oceanographic variables. During the period 2003 – 2006 HWDT will be sharing all data collected from *Silurian* with SMRU and DML. This will contribute to this wider study of the west coast. SMRU and DML have assisted HWDT by providing necessary equipment and technical advice. HWDT have worked with SMRU to utilise *Silurian* as a platform to undertake a range of pilot projects. This includes suction cupping of minke whales and testing of seal tags.

- Marine Biological Association (MBA)

HWDT is a partner in a three year project, along with MCS, TST, IFAW, MER to investigate the UK population of basking sharks. HWDT are contributing all effort related sightings data from *Silurian*, all photo identification obtained and all casual sightings data from our community sightings scheme.



Basking Shark feeding on plankton

- Sea Watch Foundation

Sea Watch is the national coordinating group for cetacean records in the UK. In July 2003, HWDT and SeaWatch carried out a joint monitoring trip of the southern Argyll waters. This allowed the two organisations to share ideas and working practices. All casual sightings data are transferred to SeaWatch on an annual basis.

Operation Logger

HWDT worked with local boat operators to encourage consistent recording of effort related sightings of cetaceans and basking sharks. This was done by installing Logger (IFAW) – a computer based data logging program which is connected to the ships Global Positioning System. This is the same system that is used on board *Silurian*. The program was modified slightly to make it compatible for use on commercial vessels. In 2003 HWDT provided the necessary computer equipment to use this software to Flamer (Inter island Cruises) and EcoCruz (Sea Life Surveys). In addition HWDT also provided photographic equipment to maximise the collection of photo-identification data. HWDT was responsible for downloading and managing this data.

Appendix



Hebridean Whale and Dolphin Trust

Research - Education - Conservation

Hebridean Whale and Dolphin Trust
28 Main Street, Tobermory,
Isle of Mull, Argyll, PA75 6NU

Main Office

Tel: 01688 302620 Fax: 01688 302728

Education, Research and Sightings Office

Tel: 01688 302859 Fax/Ans: 01688 302858

Email: hwdt@sol.co.uk Website: www.hwdt.org

Luing Primary School
Isle of Luing, Argyll
PA34 4TY

Dear Ms Currie,

Thank you for participating in the Education Outreach Project run by the Hebridean Whale and Dolphin Trust. It was a pleasure having your students aboard the Silurian. I wonder if you would be kind enough to answer the following questions: (Please use a separate sheet if needed)

1. How well were your expectations of the visit to Silurian matched by your experience aboard?

Our expectations were vastly exceeded. I knew that the children were enthusiastic but I did not expect such a variety of well-planned activities or such patience from a wonderful crew. Young children can become restless when initial excitement has worn off but this was never a problem, right up to the final disembark.

2. Did the activities for the children tie in with the curriculum? Was the 'pitch' appropriate to the knowledge of the different age groups? The 'pitch' was perfect, mainly because of the attitude of crew.

We had been studying local wildlife in science and studying aspects of the sea. Considering that we had looked at so many books and films already, it was really amazing how much more we all learned on board. The learning experience was greatly enhanced by

3. Were there any activities that you would like to be repeated or extended in a future visit? *technical equipment on board.*

The children really enjoyed everything they did on board. It was agreed that it would be fun to catch or find their own material for observation under a microscope. Perhaps we could arrange a slightly longer earlier visit on a future occasion.

4. Having been aboard for the educational session and seen the resources on the Silurian, do you have any suggestions for additional activities?

The computer 'sounds' were quite fascinating for everyone. Perhaps this session could include a video clip of whales/dolphins etc? Older children could do 'jobs' for the skipper (after suitable training?).

Thank you very much for giving your time to this evaluation. Please feel free to add any general comments on your experience of the Education Outreach work, particularly any suggestions that you may have for diversifying and improving the project.

Kind regards,

Caroline Lathe
Education Officer



Hebridean Whale and Dolphin Trust

Research - Education - Conservation

Hebridean Whale and Dolphin Trust
28 Main Street, Tobermory,
Isle of Mull, Argyll, PA75 6NU

Main Office

Tel: 01688 302620 Fax: 01688 302728
Education, Research and Sightings Office
Tel: 01688 302859 Fax/Ans: 01688 302858
Email: hwdt@sol.co.uk Website: www.hwdt.org

Craignish Primary School
Ardfern, Lochgilphead, Argyll
PA31 8QN

Dear Mrs McLeod,

Thank you for participating in the Education Outreach Project run by the Hebridean Whale and Dolphin Trust. It was a pleasure having your students aboard the Silurian. I wonder if you would be kind enough to answer the following questions: (Please use a separate sheet if needed)

1. How well were your expectations of the visit to Silurian matched by your experience aboard?

Exceeded - I had not expected so many different aspects to be addressed. I think it's really important that children living around the coast are aware PTO

2. Did the activities for the children tie in with the curriculum? Was the 'pitch' appropriate to the knowledge of the different age groups?

Very much so - staff and volunteers very quickly assessed existing knowledge & built upon it.

3. Were there any activities that you would like to be repeated or extended in a future visit?

Examination of sea creatures & explanation of their feeding, habitat etc.
Whale & dolphin watching - the work of the Trust & its importance

4. Having been aboard for the educational session and seen the resources on the Silurian, do you have any suggestions for additional activities? PTO

There's a focus on 'Citizenship', currently in schools - perhaps some focus on how children living around the coast can be

Thank you very much for giving your time to this evaluation. Please feel free to add any general comments on your experience of the Education Outreach work, particularly any suggestions that you may have for diversifying and improving the project. PTO

Kind regards,

Caroline Lathe

Caroline Lathe
Education Officer



Hebridean Whale and Dolphin Trust

Research - Education - Conservation

Hebridean Whale and Dolphin Trust
28 Main Street, Tobermory,
Isle of Mull, Argyll, PA75 6NU

Main Office

Tel: 01688 302620 Fax: 01688 302728

Education, Research and Sightings Office

Tel: 01688 302859 Fax/Ans: 01688 302858

Email: hwdt@sol.co.uk Website: www.hwdt.org

Tobermory Primary School
Isle of Mull, Argyll
PA75 6PB

Dear Mrs Anderson,

Thank you for participating in the Education Outreach Project run by the Hebridean Whale and Dolphin Trust. It was a pleasure having your students aboard the Silurian. I wonder if you would be kind enough to answer the following questions: (Please use a separate sheet if needed)

1. How well were your expectations of the visit to Silurian matched by your experience aboard?

Much, much better than I expected.

2. Did the activities for the children tie in with the curriculum? Was the 'pitch' appropriate to the knowledge of the different age groups?

Yes tied in with 5-14. Pitched just right.
Science

3. Were there any activities that you would like to be repeated or extended in a future visit?

Touch tank especially.
All other activities repeated.

4. Having been aboard for the educational session and seen the resources on the Silurian, do you have any suggestions for additional activities?

No. Everything was great. Students loved their visit. A brilliant learning experience.

Thank you very much for giving your time to this evaluation. Please feel free to add any general comments on your experience of the Education Outreach work, particularly any suggestions that you may have for diversifying and improving the project.

Kind regards,

Caroline Lathe
Education Officer