



# Scottish Shark Tagging Programme (SSTP)



## Interim Progress Report

Date: July 2010





## Scottish Shark Tagging Programme Progress Report

Welcome to the first of the SSTP's reports on the progress of the programme.

First of all, a big thank you to all who have contributed to the programme so far, the number of tag returns so far is impressive and is solely down to you, the anglers, who have contributed your time and effort.

In this report the content is based solely on the data entered into the SSTP so far, we have yet to get all the historic data from Glasgow and the UKSTP uploaded.

### Project overview

Number of anglers with data on the SSTP:	<b>136</b>
Total number of entries:	<b>867</b>
Number of recaptures:	<b>59</b>
Total number of tagged fish:	<b>808</b>
% recapture rate:	<b>6.8%</b>

Species Tagged:	<b>Blonde Ray</b>
	<b>Bull Huss</b>
	<b>Common Skate</b>
	<b>Spurdog</b>
	<b>Thornback Ray</b>
	<b>Tope</b>

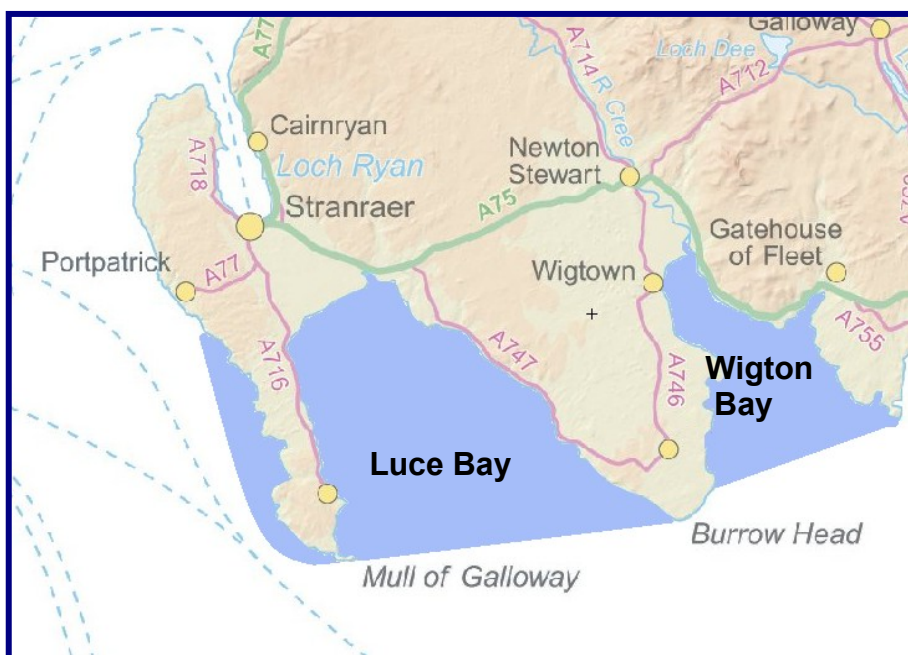
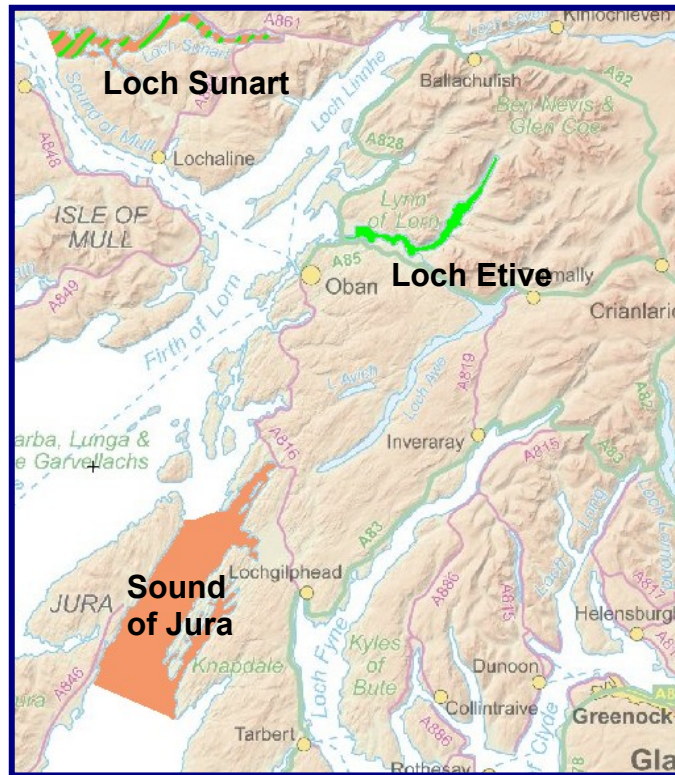
Species Recaptured:	<b>Common Skate</b>
	<b>Spurdog</b>
	<b>Tope</b>

Before we take you through the recaptures, we thought we would just quickly update you on some other aspects of the project first including our website, the Facebook page and some of the education events we have been running.



## The main tagging locations

There are 5 main areas that the SSTP is receiving data from so far; these are Loch Sunart, Loch Etive, Sound of Jura, Luce Bay and Wigton Bay. There is data from other sites, but the 5 mentioned above are the only sites showing recaptures so far.





## **Facebook**



The SSTP's Facebook page is gathering strength with currently over 300 followers. The site is a useful place for anglers to interact with each other, discuss issues and post photos from the weekend's fishing. It's also a useful place for non anglers to learn about the SSTP.

The Facebook site is updated weekly so you can keep up to date with any events that the SSACN are organising, such as the Tagathon based around Loch Sunart and Loch Etive in November 13<sup>th</sup>-14<sup>th</sup> this year.

If you are a Facebook user and would like to keep up to date with the SSTP then just type Scottish Shark Tagging Programme into the search engine on Facebook or follow the link through [www.tagsharks.com](http://www.tagsharks.com).

## **The SSTP Website - [www.tagsharks.com](http://www.tagsharks.com)**

The SSTPs website ([www.tagsharks.com](http://www.tagsharks.com)) continues to gain momentum with visits steadily rising. These peaked during Sharkatag 2010 with 255 unique visitors in a day! This is a huge number of hits for such a specialist website with people from all over the world visiting.

What are they looking at when they do visit our site? The most popular page was unsurprisingly the Sharkatag 2010 page, the nature and success of the event attracts a very wide audience.

### ***Website Stats at a glance:***

Maximum unique visitors in one day : 255

Countries: Predominantly the UK & USA but also from 20 other countries worldwide

Most popular pages over the last 3 months:

#1= Sharkatag

#2= Lauren on Location

#3= Tutorials such as Catching common skate by Davy Holt

#4= Submitting tag data

#5= Anglers yarns

### ***Tagger of the month:***

This relatively new section of the website was created to highlight the contributions of individual taggers to the programme. At the end of each month the person who has submitted the most records (recaptures and new tags) is heralded the 'Tagger of the Month'. So far we have had four top taggers:

**Gordon Goldie    Stuart Cresswell    Dale Robertson    Matthew Burrett**

More information on these dedicated taggers can be found at [www.tagsharks.com/hall-of-fame](http://www.tagsharks.com/hall-of-fame)



### ***Largest fish on our records***

The two equal heaviest skate so far are two females weighing 214lb (estimated) tag numbers 2488 and 2751, both caught in the Sound of Jura. One by Willie Kennedy, the other by Ian Burrett.

The largest Spurdog so far is a 21.25lb female tag number 28905 caught in Loch Sunart by J. Wilson and the largest tope so far is a 71lb (estimated) male caught off of Corsewall point by J. Spiers.

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As always, no sooner do you write something than it gets updated – we have a new heaviest tope - Jan Meijlink has just caught an impressive 73lb female in Dumfires and Galloway! Well done Jan...great fish!



### ***Days freedom***

The number of days between tag and release and subsequent recapture is of interest as most shark, skate and ray breeding patterns occur on a 2 year cycle.

The occurrence of different age groups and sexes in different areas at different time intervals can tell us at what stage of the breeding cycling or what they are using a particular area for e.g. congregating to reproduce.

Long delays between tag and recaptures also serve as a reassuring marker that the tags do stay in the fish and the fish suffers no long term harm from the tagging process.

So far the greatest 'freedom fighters' in the SSTP are:

Tag number 4084, a mature male common skate who went 1835 days between captures; number 28905, a large mature female spurdog (also the heaviest on our records went 455 days; and number 21152 a female Tope who went 1501 days.

## Educational Outreach

The SSTP is keen to help educate Scottish children about the shark, skate and ray species in local waters. As part of this we have been visiting primary schools throughout Scotland running education and awareness events.

All of these have so far included classroom based session, educating the children about the sharks, skates and rays in Scottish waters; what makes them different from other fish; and how their well developed senses allow them to be the effective and impressive hunters.

Linked into this have been eggcase hunts where the children have been to the beach to look for eggcases and have then taken them back to the classroom for identification.

### ***Dallintober & Drumlenbull - March***

An education day was run at each school in association with the GRAB trust with the emphasis on eggcases as both schools were teaming up the following day to do a combined beach clean and eggcase hunt at Machrihannish beach.

Foul weather did not deter the 44 children from finding numerous eggcases including several small spotted cat sharks (*Scyliorhinus canicula*) and one Blonde Ray (*Raja brachyuran*) eggcase.



***Coll - April:*** In trying to reach as wide an audience as possible; one of the furthest schools we have visited is Arinagour Primary School on the Isle of Coll.



The day was a huge success with (slightly windy) beautiful sunny weather allowing the class to spend all afternoon scouring the beach at Feall Bay for eggcases after a morning learning fascinating shark facts. Many Catshark eggcases (*Scyliorhinus canicula*) were found and the pupils were so inspired by the day that a few returned the following weekend to hold their own eggcase hunt, finding a very impressive 48 catshark eggcases!

Aileen Cook, the head teacher at Arinagour, said the children had thoroughly enjoyed their day and were keen to learn more about the shark, skate and ray life on their doorstep!

***Inverary Outdoor learning festival – May*** This was an event for teachers throughout Argyll to highlight different methods of teaching outdoors. The SSTP accompanied the GRAB Trust to help launch a new game aimed at educating primary school children about the marine environment.

The game was developed by Argyll and Bute Local Biodiversity Action Plan Marine Forum and adds to the “Sea & Learn” teaching pack - the SSTP has been developing a unit on Scottish elasmobranchs to add to the pack.

The game was a huge success and many of the teachers involved in the workshop were very interested in the education material offered by the SSTP with several shark education packs being requested.



### **Lochnell - June**

The SSTP went to Lochnell primary school in Benderloch to spend the morning with the children teaching them about sharks, skates and rays.

The following week, the SSTP joined up with the GRAB Trust and joined the school during a field visit to the Isle of Kerra to help the children look for eggcases as well as run some educational activities on the beach.



Unfortunately, no eggcases were found (although a non result is interesting too!), but the children really enjoyed the activities on the beach and had a great time doing shore transects, learning about other marine life that lives on Scottish shores.

As James is a marine biologist, he was happy to teach the children about other marine life, although it is clear that the children are mainly interested in sharks!

### **Barcaldine - June**

Barcaldine School SSTP used the Sea and Learn game for the first time to test the children on what they had learned in a classroom session about elasmobranchs. We also did several activities where the children act out which senses sharks use and what can interfere with them and determining the senses sharks use to detect their food from different distances.

### **Drummore - June**

The SSTP went to Drummore Primary school during the SSACN Sharktag event.

After spending an hour in the classroom with the children teaching them about elasmobranch biology, the class took advantage of the good weather and went down to the local beach to do some outdoor activities (such as measuring out shark lengths to compare the sizes of the different species) and look for eggcases.

This proved to be very successful with eleven Catshark eggcases (*Scyliorhinus canicula*) and four Thornback ray (*Raja clavata*) cases found. The children also played the Sea and Learn game on the beach.

### **List of Recaptures to date**

#### **Tope**

Tag Number	Date Caught	Days freedom	Sex	Weight	Location
835	13/06/2009	Tag	M	34	Wigtown Bay
835	28/06/2009	15	M	37	Luce Bay
21152	04/06/2005	Tag	F	18	Luce bay
21152	14/07/2009	1501	-	-	-
25719	24/06/2007	Tag	F	27	Luce Bay
25719	17/10/2009	846	F	38	Luce Bay
25740	05/08/2008	Tag	M	32	Luce Bay
25740	25/08/2008	20	M	30	Luce Bay



## Skate

Tag Number	Date Caught	Days freedom	Sex	Weight	Location
328	12/11/2009	Tag	F	21	-
328	13/11/2009	1	F	21	-
328	01/12/2009	18	F	21	Sunart
808	16/04/2010	Tag	F	209	Jura
808	16/04/2010	0	F	210	Jura
2409	02/11/2009	Tag	F	21	Jura
2409	06/11/2009	4	F	30	Jura
2412	-	-	-	-	Jura
2412	21/02/2010	-	F	30	Jura
2412	04/04/2010	42	F	26	Jura
2419	01/12/2008	Tag	M	21	Jura
2419	05/02/2010	431	M	24	Jura
2487	30/10/2009	Tag	F	201	Jura
2487	28/03/2010	149	F	188	Jura
2490	09/11/2009	Tag	M	121	Jura
2490	21/02/2010	104	M	125	Jura
2493	05/11/2009	Tag	M	24	Jura
2493	07/11/2009	2	M	-	Jura
2716	12/11/2009	Tag	F	24	-
2716	03/04/2010	142	F	25	Sunart
4542	07/04/2009	Tag	M	166	Jura
4542	10/04/2010	368	M	165	Jura
5901	07/04/2009	Tag	F	165	Jura
5901	10/11/2009	217	F	162	Jura
5905	12/04/2009	Tag	F	159	Jura
5905	05/02/2010	299	F	176	Jura
5912	14/04/2009	Tag	M	41	Jura
5912	29/10/2009	198	M	47	Jura
5915	15/04/2009	Tag	M	56	Jura
5915	05/02/2010	296	M	75	Jura
5922	10/04/2009	Tag	F	58	Jura
5922	07/03/2010	331	F	76	Jura





## Spurdog

Tag Number	Date Caught	Days freedom	Sex	Weight	Location
326	14/11/2009	Tag	-	6.5	Sunart
326	29/11/2009	15	-	-	Sunart
1542	14/11/2009	Tag	F	5.5	Etive
1542	04/12/2009	20	F	5.75	Etive
27926	05/07/2008	Tag	F	15	Etive
27926	09/11/2009	492	F	19.25	Etive
27987	17/01/2009	Tag	F	9.1	Etive
27987	25/04/2009	98	F	-	Etive
28905	15/11/2008	Tag	F	21.25	Sunart
28905	13/02/2010	455	F	16.3	Sunart
29137	16/11/2008	Tag	F	10	Sunart
29137	28/10/2009	346	-	-	Sunart

## Summary

The recaptures show the three species demonstrate some site fidelity.

Spurdog and common skate recaptures suggest the animals stay in small areas for extended periods, which furthers the argument for resident populations.

However, it is unlikely that the tope caught in Luce Bay and Wigton Bay are resident. It is more likely that they return to the same coastal waters annually for feeding and breeding purposes; this combined with the anecdotal evidence of high numbers of juvenile tope in those areas, highlights the importance of them to the species.

We shall be producing a more 'in depth' analysis of tagging data once the UKSTP and Glasgow Museums tagging data has been added to our own, meanwhile we'd like to thank all those involved for their fantastic support.

The SSTP team.

## References:

Figure 2: Fisheries Laboratory. 1967. Spurdogs: Laboratory Leaflet. Fisheries laboratory Lowestoft.  
 Figure 3 & 4: Sutcliffe, R. 1994. Twenty years of tagging common skate and tope off the west coast of Scotland. Shark Skate and Ray workshop, 15-16<sup>th</sup> February 1994. London.

