



Living North Sea

# Tweed Sea-trout at Sea

Ronald Campbell, The Tweed Foundation



Tweed Sea-trout have long been known to be different from other Sea-trout on the Scottish East coast

They are much larger, both on average and in the sizes they can reach.

They are more like those of the Northumbrian and Yorkshire rivers to the south



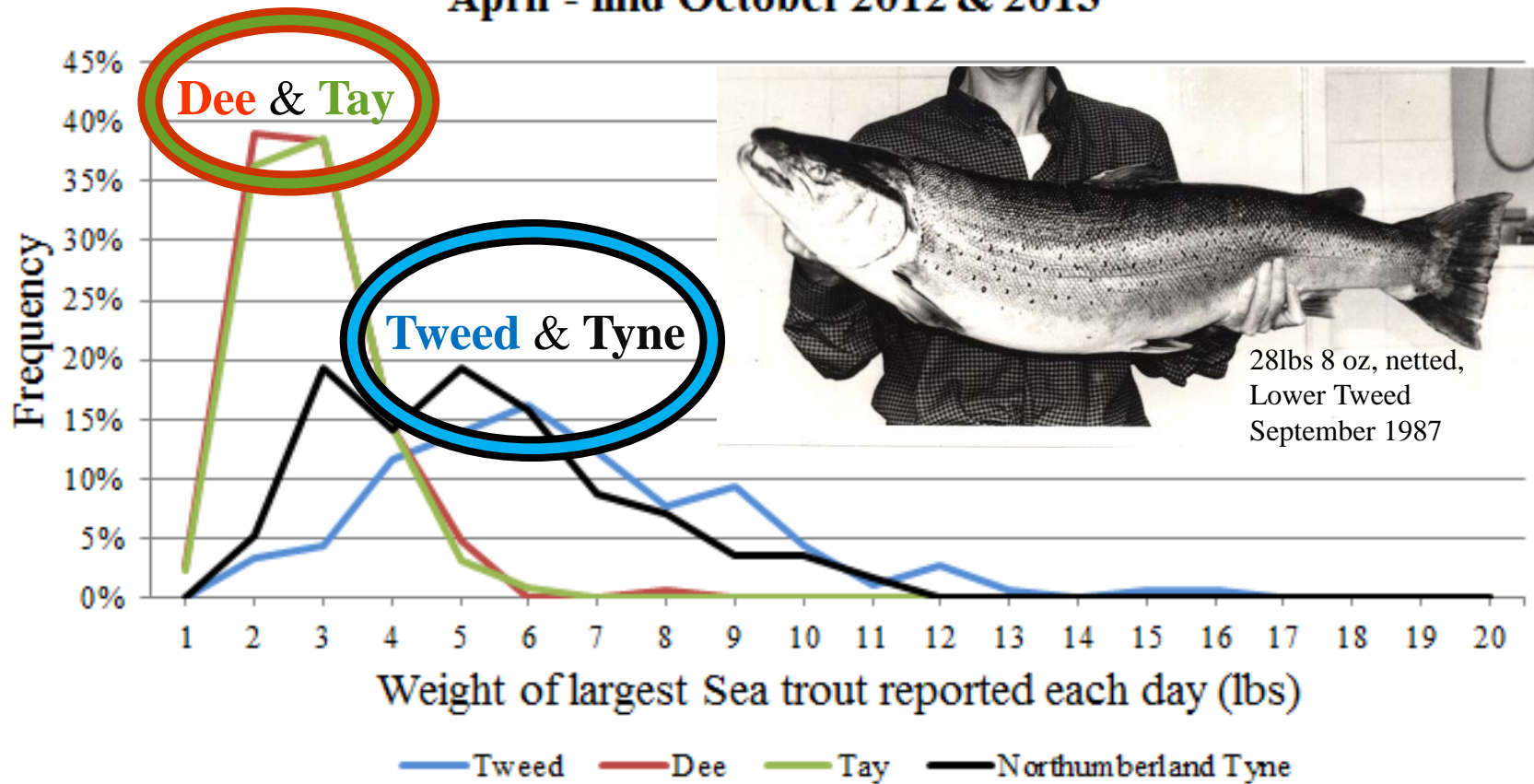
*“We must not forget that the Ewe and the Trout found the  
A. b. p. and the A. b. p. are similar in color to  
the A. b. p. of the North Sea. The A. b. p. of the  
North Sea is the A. b. p. of the North Sea, the A. b. p.  
of the North Sea are similar”*

Nall, G.H., 1930

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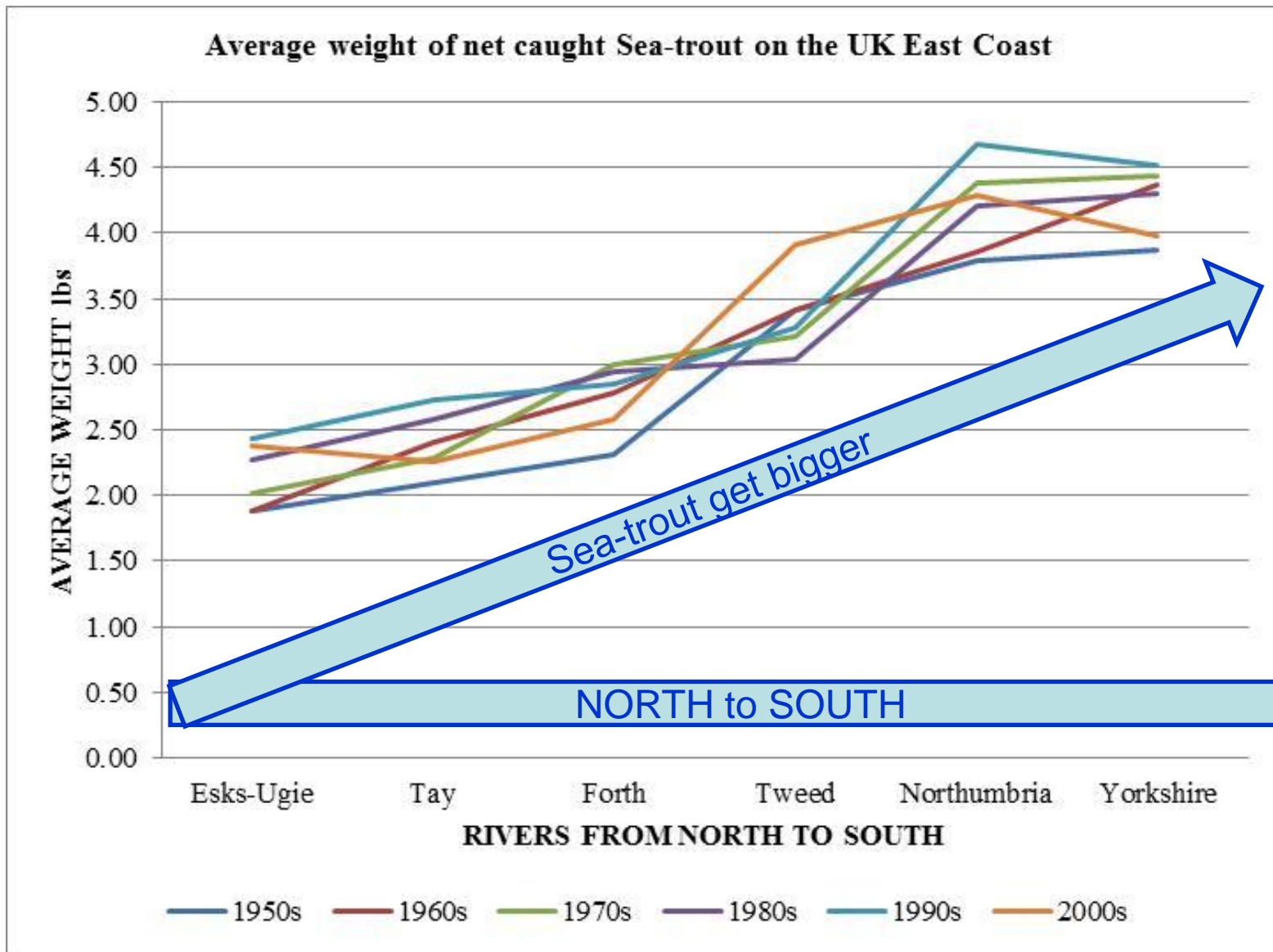


## Largest daily Sea-trout on FishPal websites April - mid October 2012 & 2013

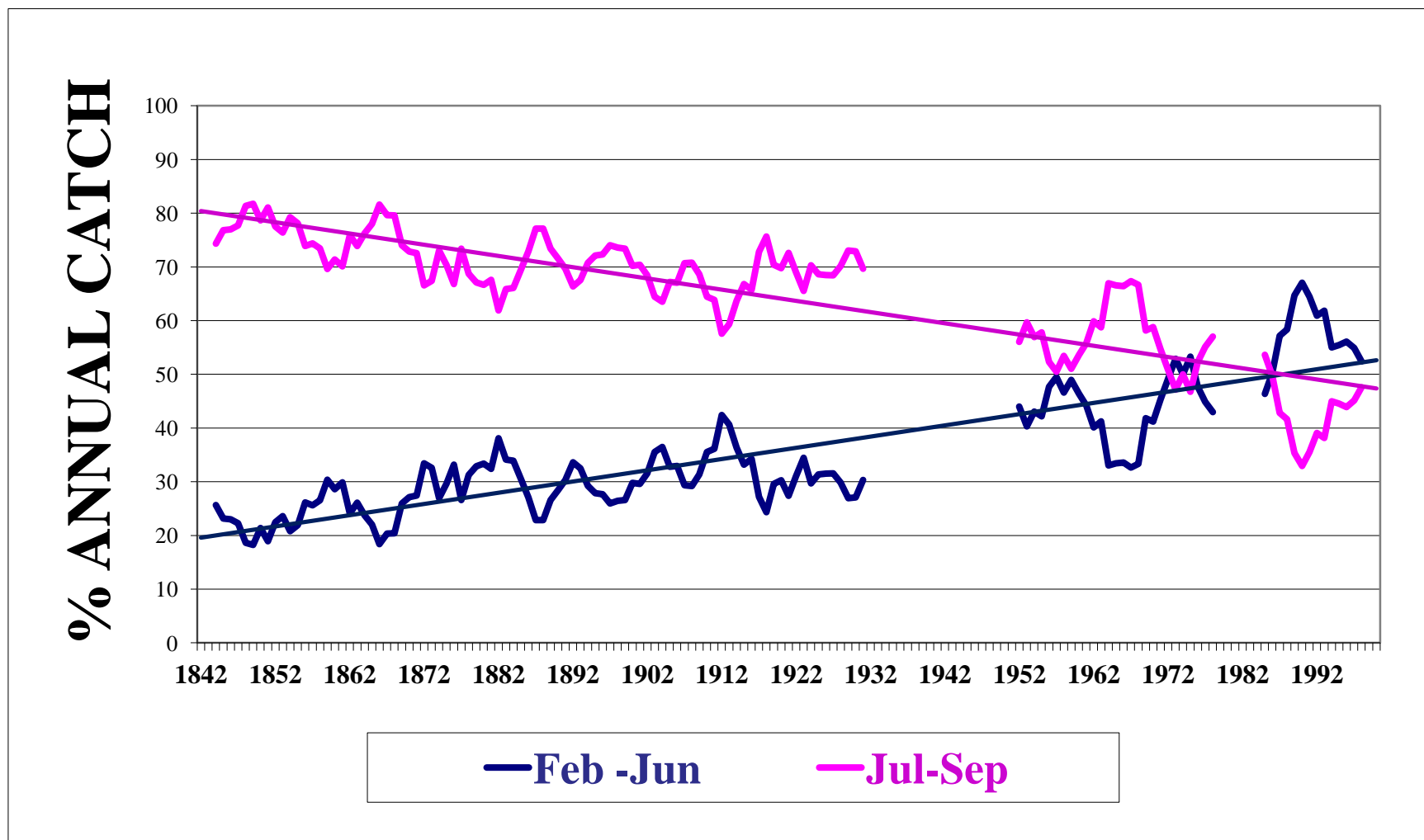




# Average sizes of Sea-trout from netting data



# SEASONAL DISTRIBUTION OF TWEED SEA-TROUT NET CATCHES

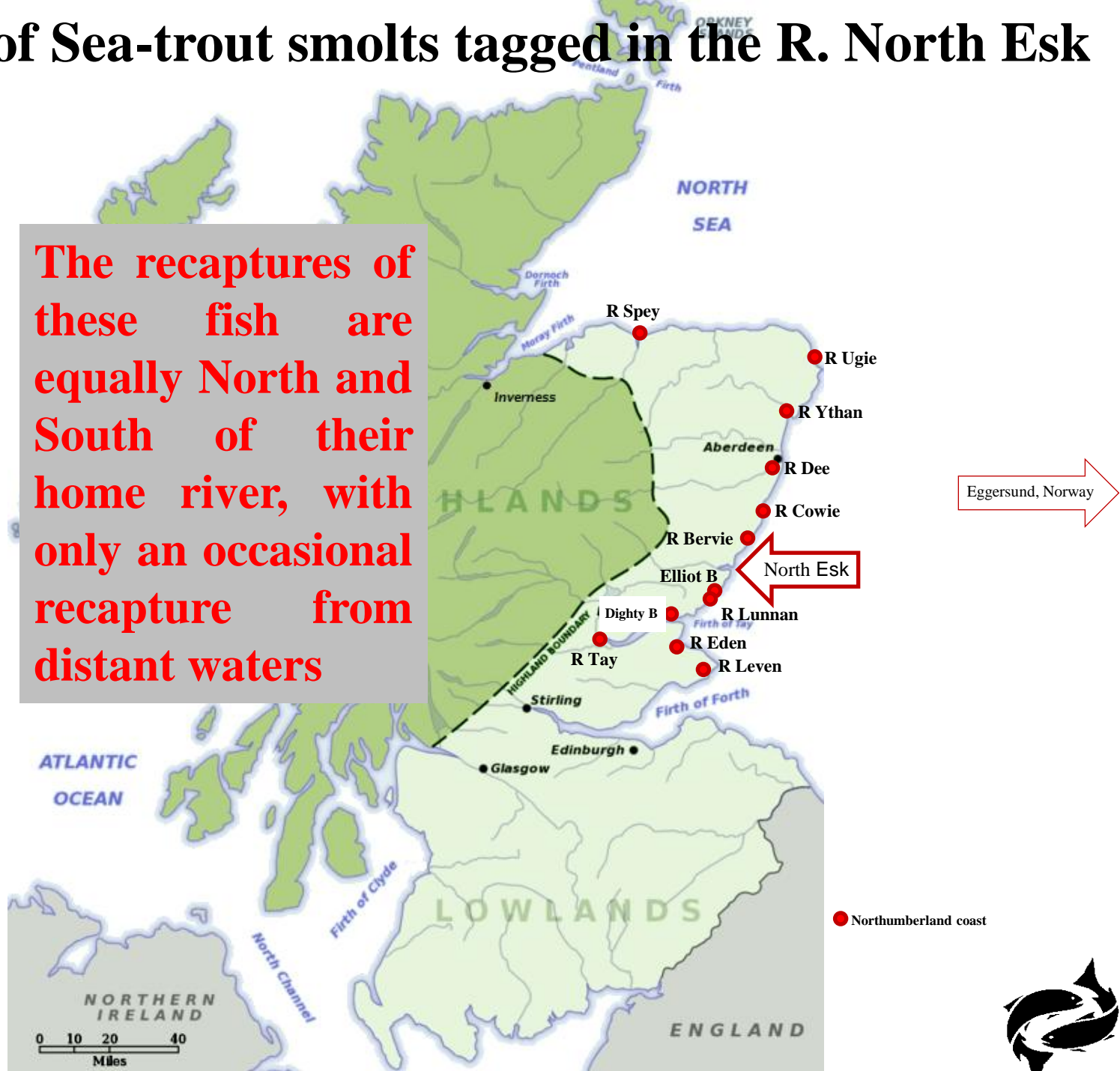


The marine migration of Tweed Sea-trout is, again, more like those of the Northumbrian and Yorkshire rivers to the south than those of the Scottish rivers to the North



# Movements of Sea-trout smolts tagged in the R. North Esk 1976-81

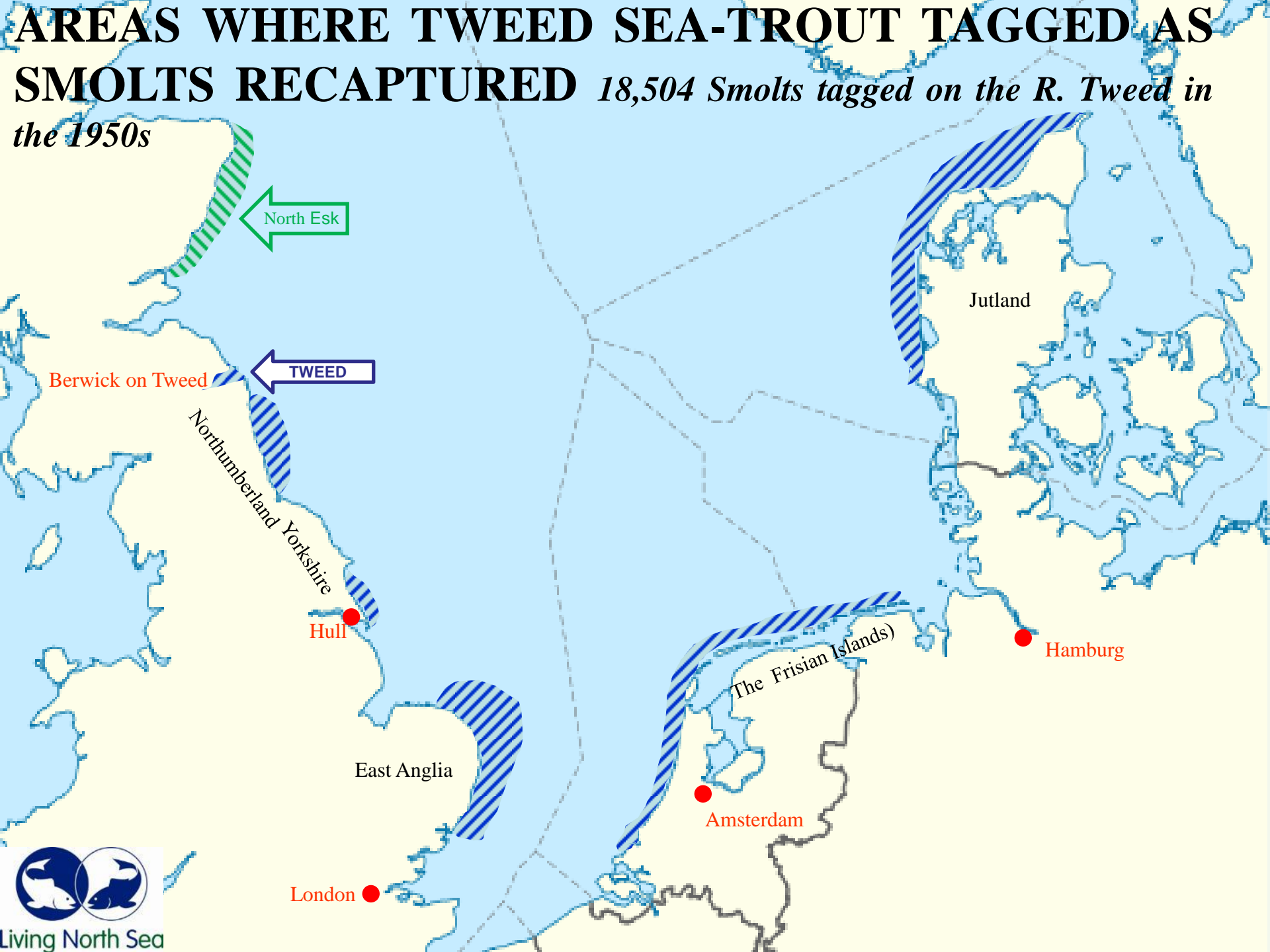
The recaptures of these fish are equally North and South of their home river, with only an occasional recapture from distant waters





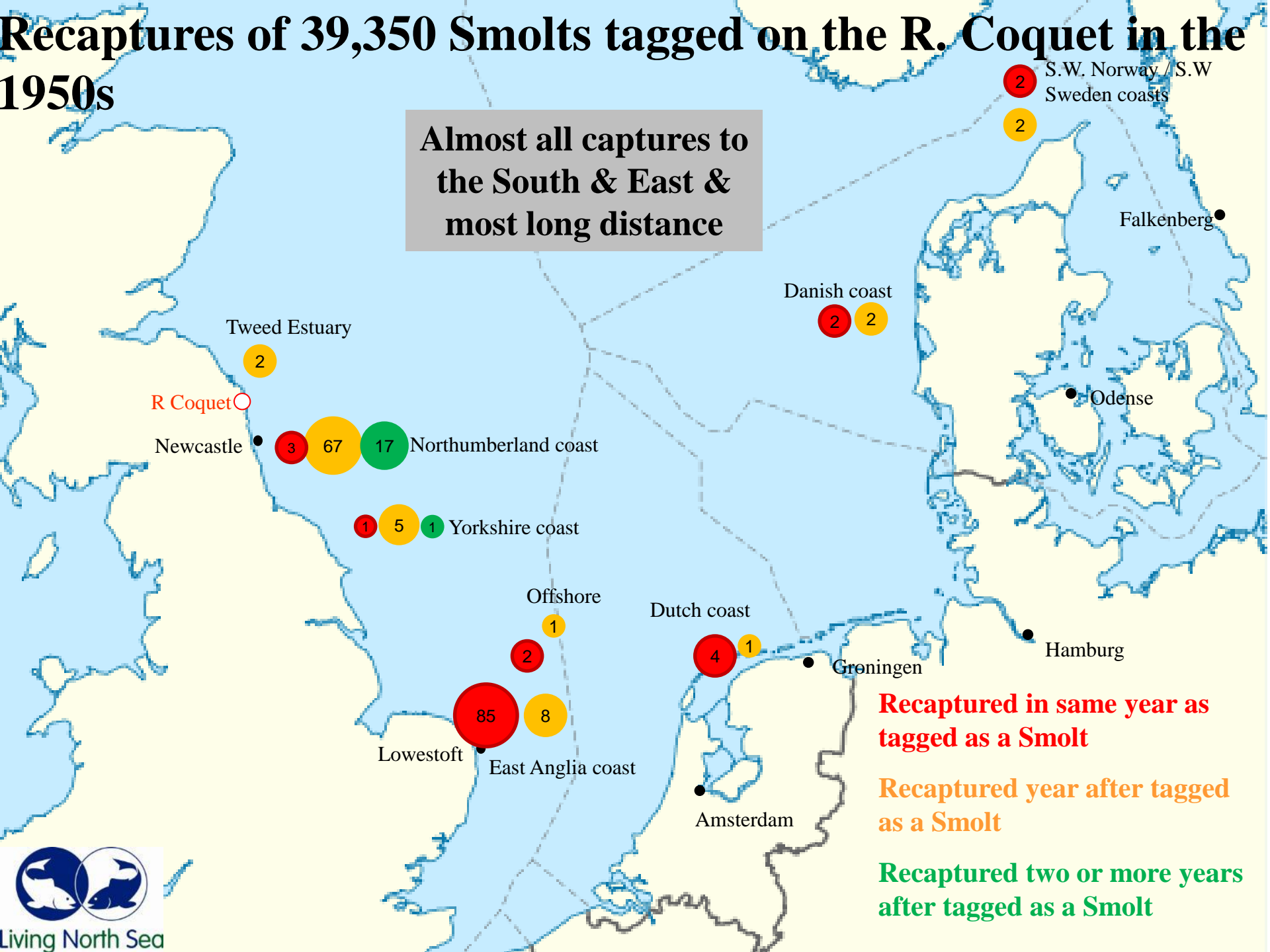
# AREAS WHERE TWEED SEA-TROUT TAGGED AS SMOLTS RECAPTURED

*18,504 Smolts tagged on the R. Tweed in the 1950s*



# Recaptures of 39,350 Smolts tagged on the R. Coquet in the 1950s

Almost all captures to the South & East & most long distance



Recaptured in same year as tagged as a Smolt

Recaptured year after tagged as a Smolt

Recaptured two or more years after tagged as a Smolt



# MIGRATION TIMINGS *Tweed Sea-trout tagged as Smolts*

These 1SW fish turned up on the Northumberland coast in June & July without being caught further to the south or east suggesting they have come across the sea rather than along the coast: the gap between 100 & 400 days when none were recaptured would then be the time they were away from coastal nets

These 1SW fish are obviously not going back to spawn till after another Winter so must be 2SW fish. The very large maiden fish that are characteristic of the Tweed are 2SW fish of 10-20lbs

Berwick on Tweed

Newcastle

Falkenberg

416 days  
June & July

552 days  
Sep & Nov

30 days  
(01)

97 days  
(06)

67 days  
(30)

Lowestoft

Groningen

Hamburg

Amsterdam

? 100 to 400 days ?



# NEW WAY ? ACOUSTIC TAGGING AT SEA



Berwick on Tweed

Smolt no. 220, released at Yarrowford, on the Yarrow Water, left the Tweed estuary at 09.25 hrs on the 10th of May and reached the Tees barrage at 23.42 hrs on the 24th May. 14 Days, Tweed to Tees

Smolt no. 255, released at Philiphaugh on the Ettrick, left the estuary at 20.07 hrs on the 9th May and reached the Tees barrage at 10.13 hrs on the 27th May. : 16 Days, Tweed to Tees

Middlesbrough

**The direct distance along the coast from the Tweed estuary to the Tees is 141kms, so smolt no. 220 travelled at a minimum speed of 2.48kms /hour and no. 255 at a minimum of 3.33 kms / hour. If they took a less direct route, they will have had to travel at faster speeds ( & the Tees barrage is 20km upriver)**



# TIMING AND RETURN of TWEED FISH TAGGED AS KELTS

Fish tagged near estuary in  
December, January, **March**,  
**April** & **May**

EARLY KELTS: Tagged in  
**December** & **January**:  
Recaptured July & August  
still far away

LATE KELTS: Mainly  
tagged **March**, **April** &  
**May**: Recaptured May,  
June, mainly July.  
Suggests a short  
migration

Smolts:  
30 days

Smolts:  
67 days  
(max 118)

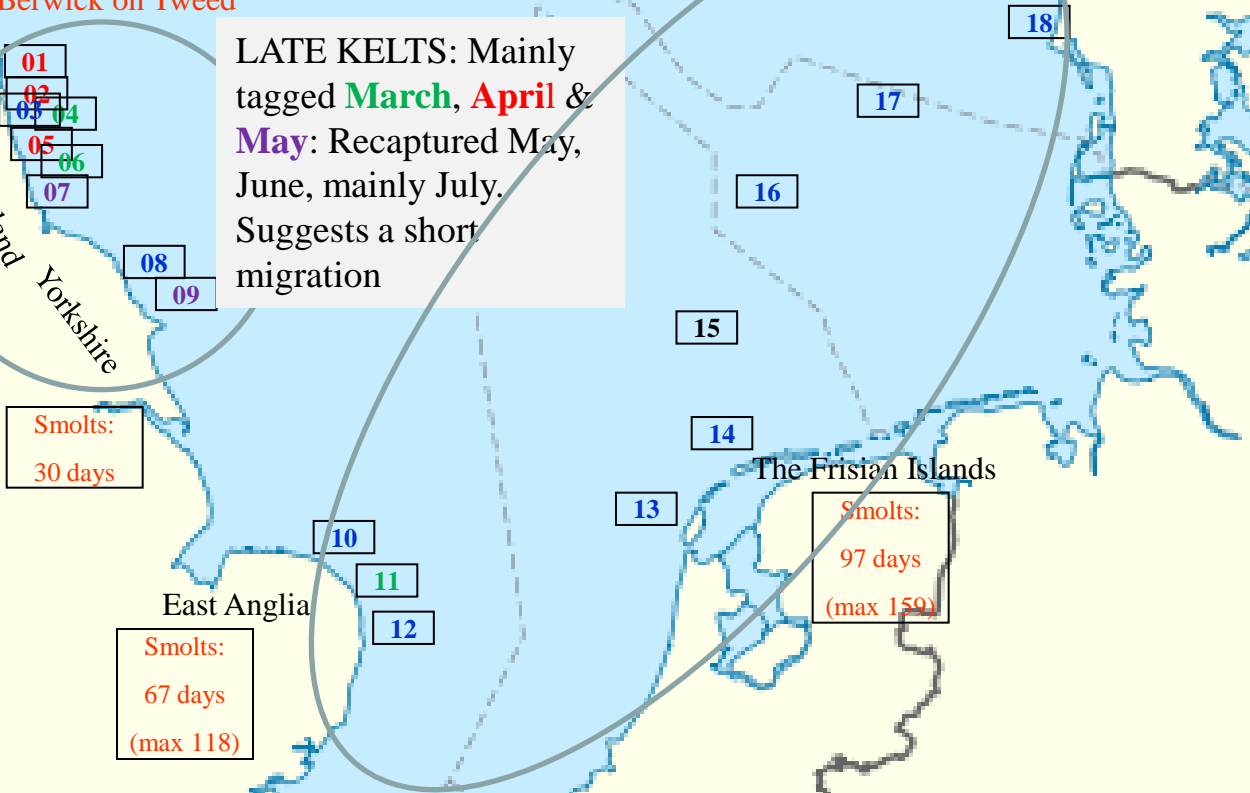
Smolts:  
97 days  
(max 159)

Berwick on Tweed  
Northumberland  
Yorkshire

East Anglia

The Frisian Islands

Denmark



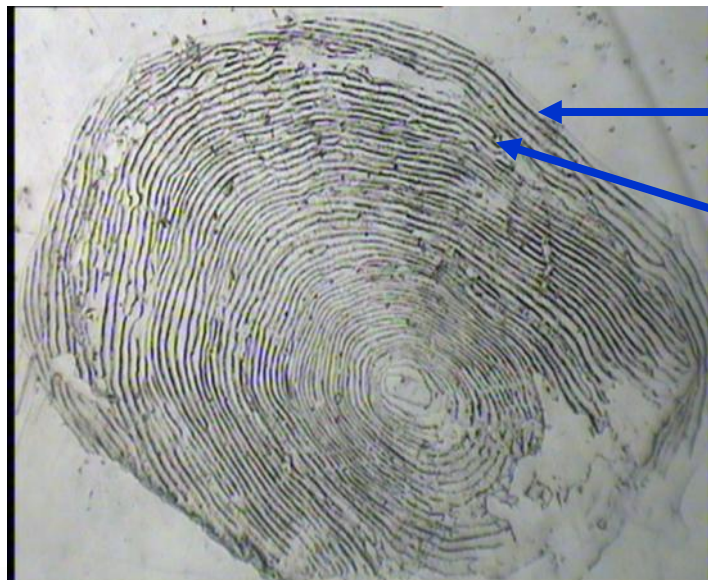


# BACK IN THE TWEED : LATE KELTS return time:

At sea for 2 - 4 months: how far can they go in that time?

TAGGED AS KELTS			RECAPTURED AS SEA-TROUT			Total Days absent
Date Tagged	Netting Station	mm	Date Recaptured	Netting Station	mm	
1994/04/21	Whitesands	430	1994/07/20	Sandstell	465	90
1994/04/28	Whitesands	560	1994/08/01	Toddles	625	95
1994/04/28	Whitesands	460	1994/08/08	Sandstell	535	102
1995/03/31	Gardo	540	1995/06/28	Gardo	575	89
1995/04/03	Canny	510	1995/06/13	Toddles	535	61
1996/04/15	Canny	605	1996/08/14	Sandstell	665	121

Smolts  
average 67  
days to East  
Anglia [there  
and back therefore  
= 134 days]



Caught, Sandstell, 20<sup>th</sup> July 1994, 465mm length

Tagged, Whitesands, as kelt, 21<sup>st</sup> April 1994, 430mm length



# RECENT TAGGINGS AND RECAPTURES

Berwick on Tweed

**A**

Taken in  
a Drift  
net

**B**

Caught by an  
angler fly-  
fishing in the sea  
for Mackerel

Caught in a  
net set for  
Plaice on the  
Island of Sylt

**C**

Reported to me within  
24hrs of capture  
through the Internet, a  
new efficiency for an  
old method





**Tillmouth, 16lb (7.3kg) Sea-trout, 18<sup>th</sup> June 2007**





Living North Sea

**The Interreg IVB  
North Sea Region  
Programme**



European Union



The European Regional Development Fund

**FIN**