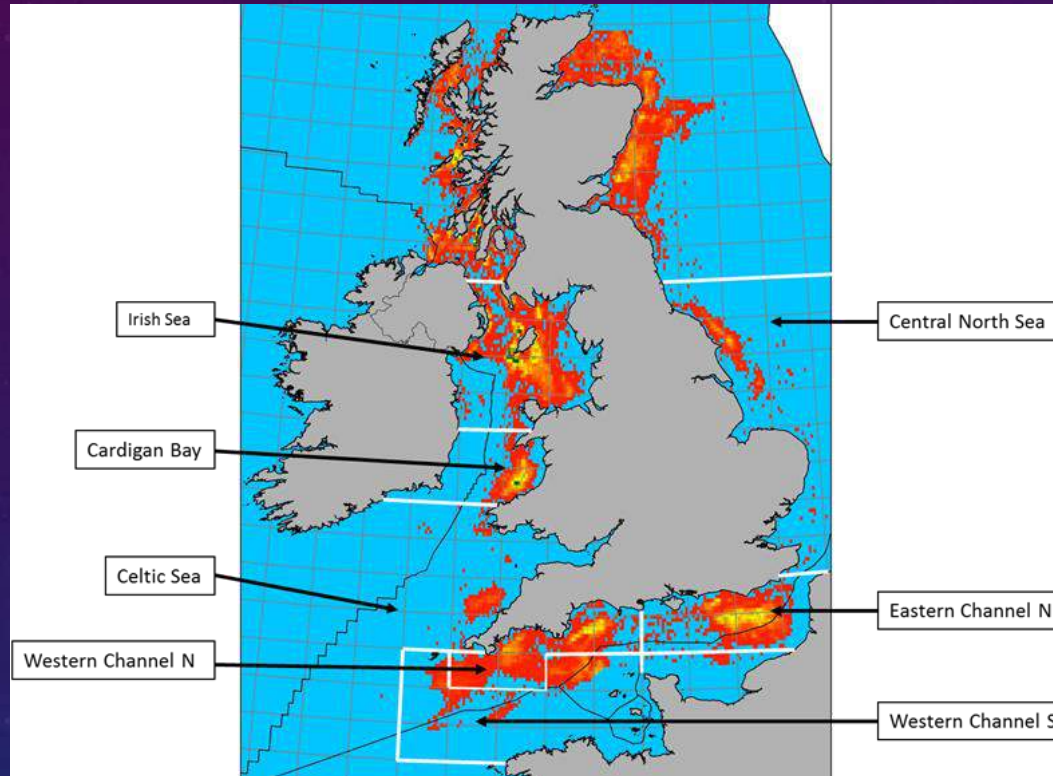


UK SCALLOP FISHERIES: TIME FOR A FUNDAMENTAL REVIEW?



Bryce Stewart



EFFECTS OF SCALLOP DREDGING

By-catch



Physical damage



Sedimentation



Vulnerable



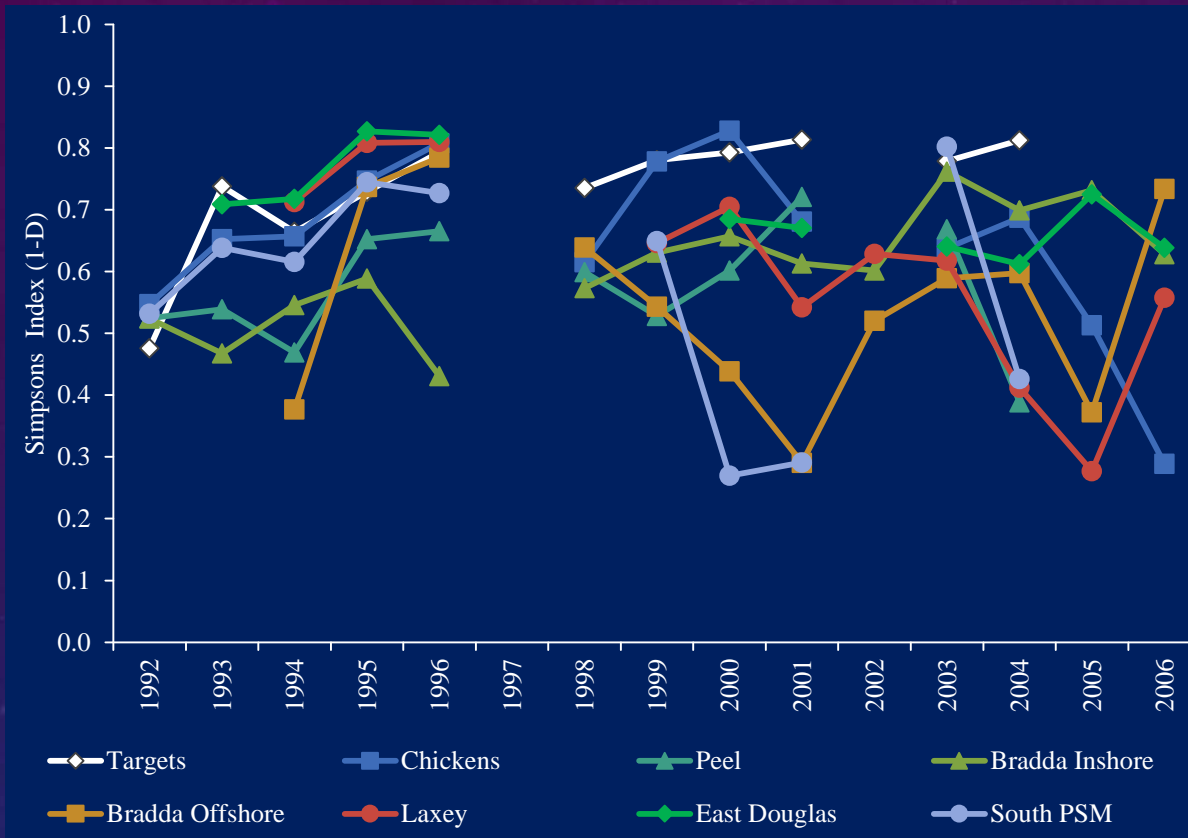
Resilient



Variable



SHIFTING BASELINES



Brown (2013). PhD thesis, University of York

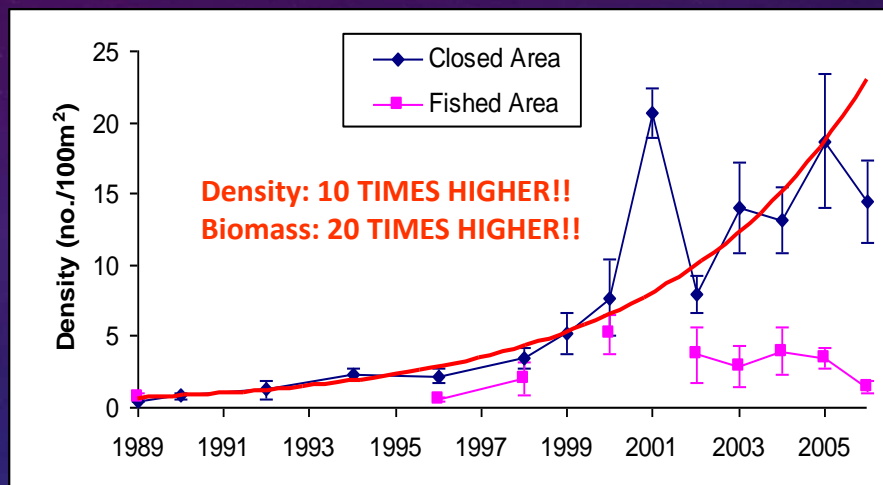
Same in English Channel: Szostek et al (2015). ICES Journal of Marine Science; DOI:10.1093/icesjms/fsv152



THE VALUE OF MARINE PROTECTED AREAS

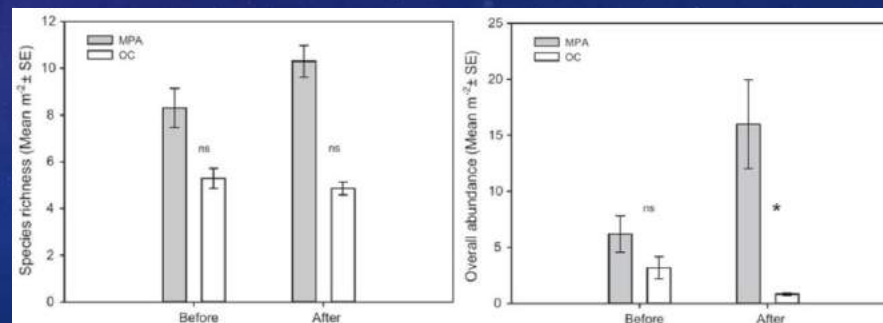
- Monitoring **recovery** of long-term (10 year +) protected areas is the **most robust** way to understand effects of dredging
- Only a handful exist in the UK: **Port Erin Isle of Man; Devon IPA; Skomer MCZ** (Blyth et al 2004, Lock et al 2012)
- All show dramatic increases in scallops & biodiversity**
- Arran NTZ & Lyme Bay MPA** also showing recovery after 3-5 years (Howarth et al 2015)
- Cardigan Bay** is unusual of studies to date (Lambert et al 2015)

Port Erin Closed Area



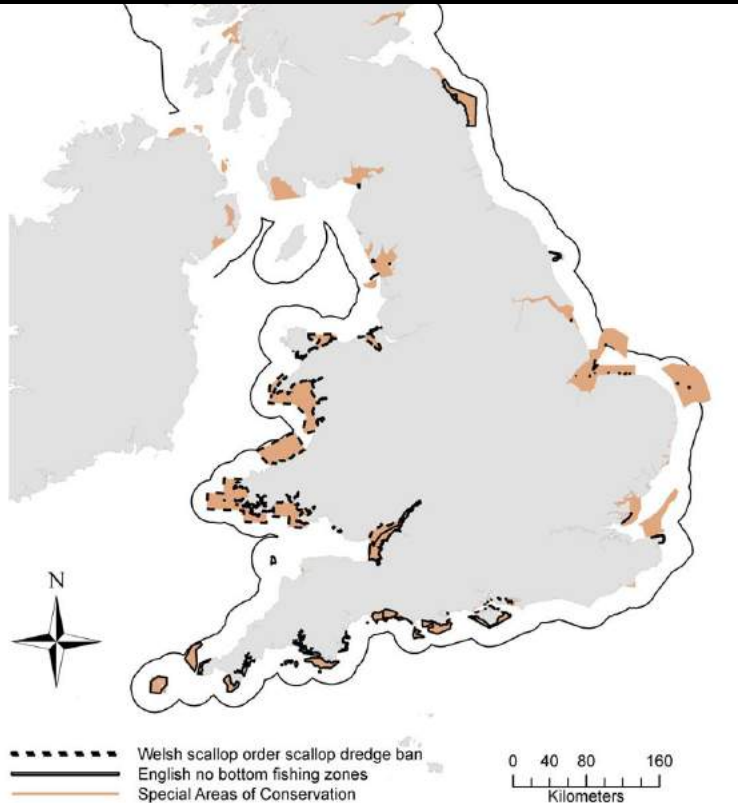
Beukers-Stewart & Brand (2007) Coastal Futures

Lyme Bay MPA



Sheehan et al. (2013) Mar Pollut Bull 76: 194-202

England & Wales: New by-laws to protect 24 reef and seagrass sites from bottom towed fishing gears (May 2014)

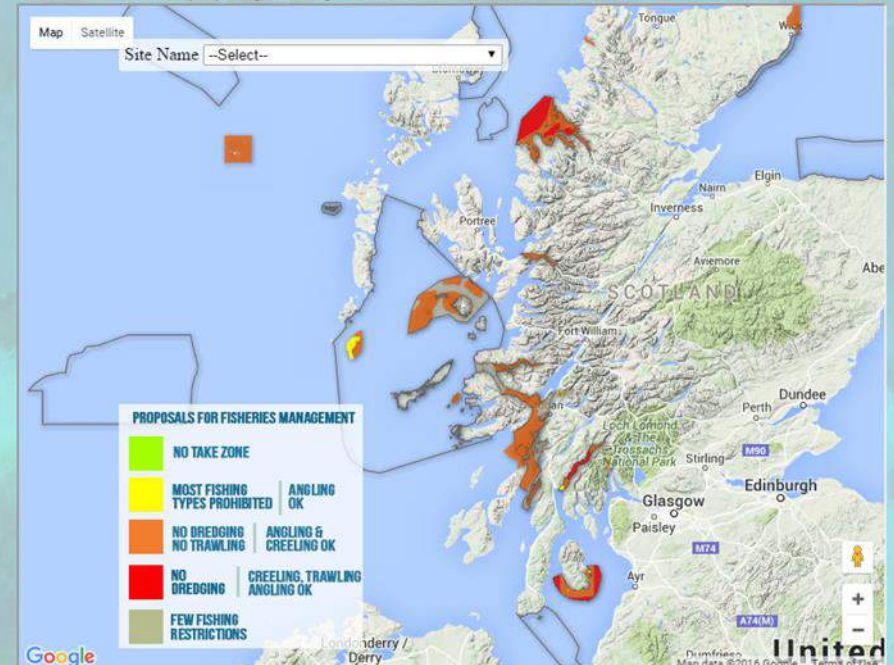


Jean-Luc Solandt, MCS

Map of Scottish nature conservation MPAs

Share: [Facebook](#) [Twitter](#) [LinkedIn](#) [Google+](#) [YouTube](#) [RSS](#)

Zoom in to explore the map and find out more about our recently designated nature conservation MPAs and how the Scottish Government is proposing to manage them. For more information see the [Marine Scotland's official info sheet](#).



Content via Scottish Environment LINK's marine taskforce and Geographic Data from [Scottish Natural Heritage](#), 2015

MANAGEMENT OPTIONS

Effort Control



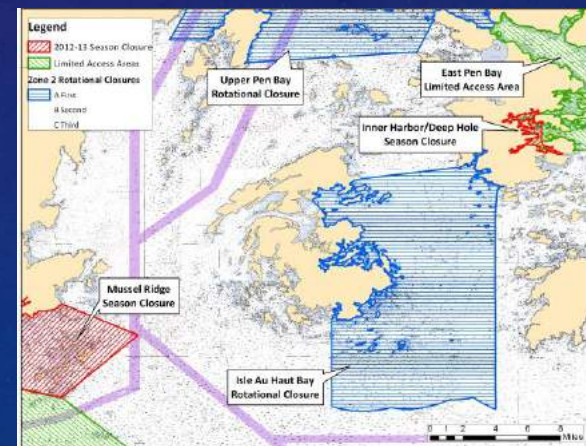
Gear Modification



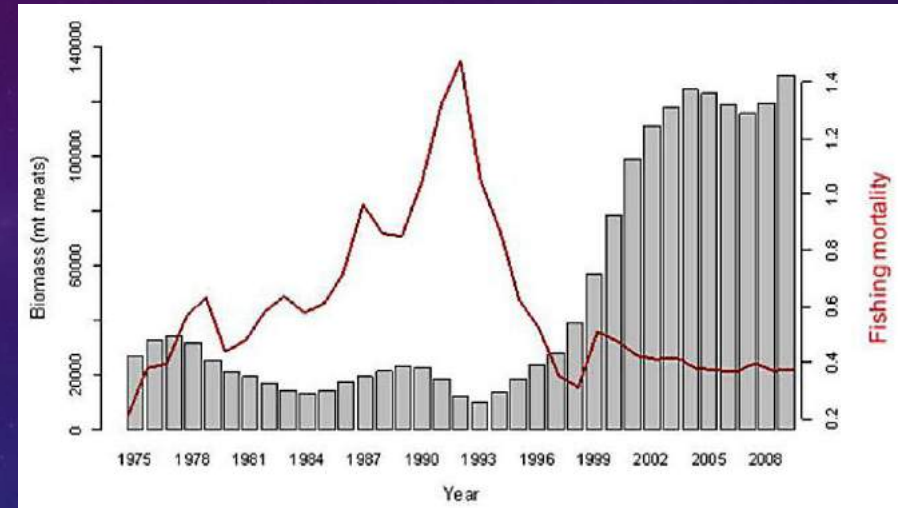
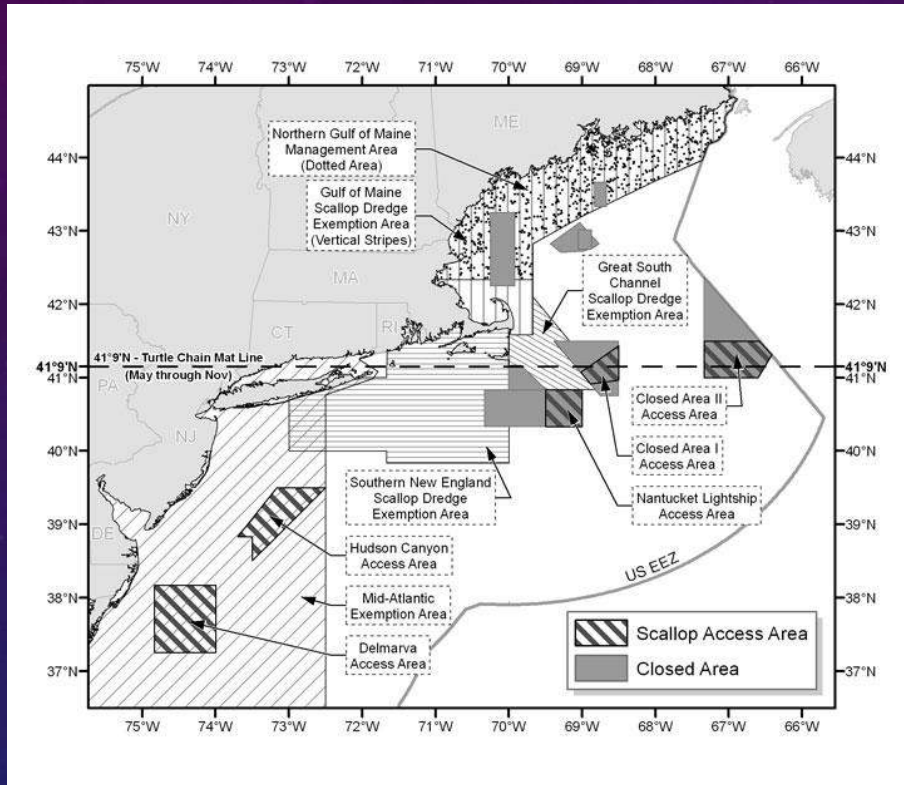
Alternate Methods



Spatial Management



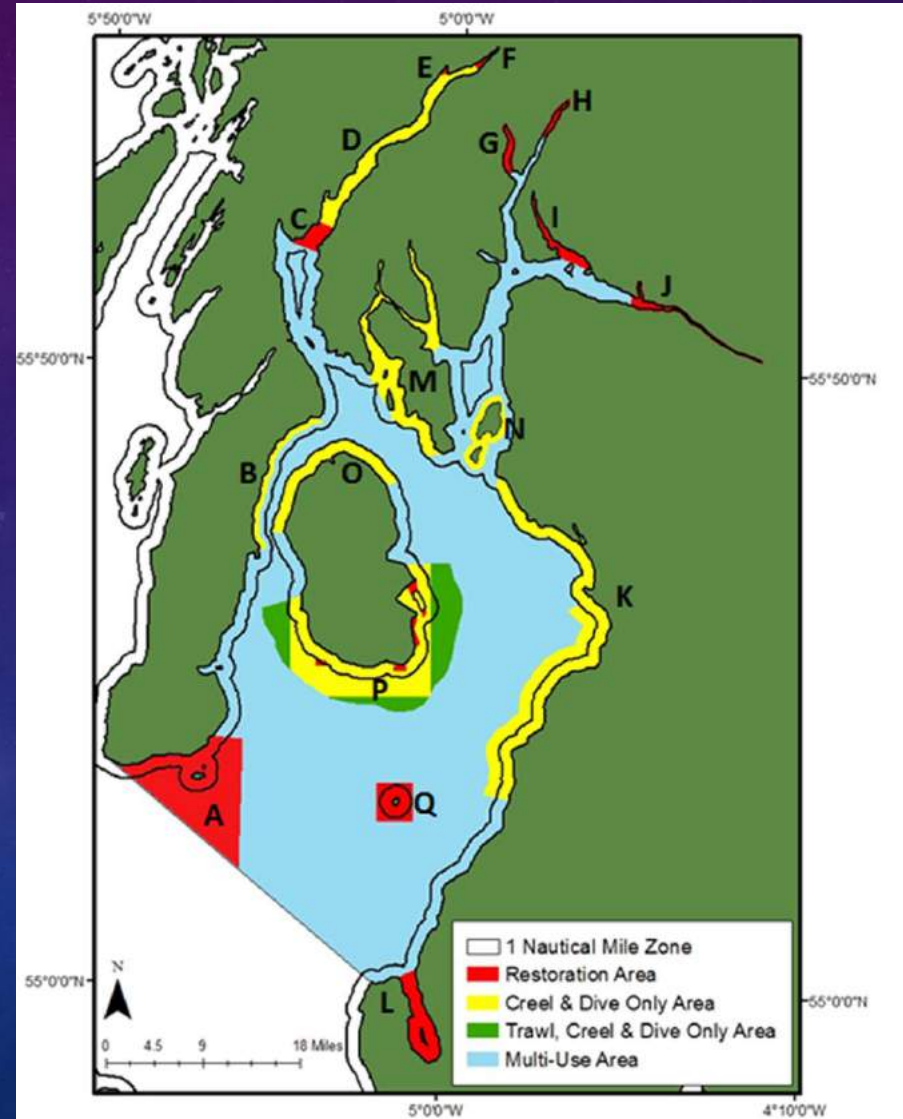
THE USA SEA SCALLOP EXPERIENCE



REVIVING THE CLYDE



- One of the **most altered** marine ecosystems in Europe
- Once supported a productive & diverse fishery – now 99% shellfish – *trawling & dredging*
- Nephrops variable but stable – scallops heavily exploited
- Recreational fishing devastated
- Proposal is for a **REGULATING ORDER**
- Spatial management
- Local control
- Highly responsive
- **Designed to balance interests of all stakeholders**



THANKS!

- Leigh Howarth
- Howard Wood
- Jean-Luc Solandt
- Rachel Allison
(Brown)
- Alex Watson-Crook
- Ruth Hoban
- Charles Millar

