

A life in fish- & shellfish management

science, people & politics

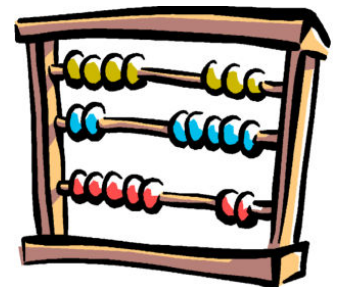
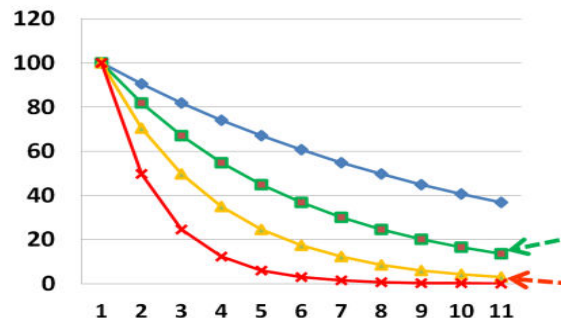


Colin Bannister BSc, PhD, DSc
SAGB Hon Life Member

Alias "Dr Balustrades"

what does he know about fushin'?"

"maybe more than you might think"



Baby steps

“trainspotting” Arctic trawlers at Hull fish dock



1960/61 biology A levels at Hull GS under Ken Fenton

1962-64 BSc : old style Hons Zoology: Profs Graham & Fretter



Summer student on oysters at MAFF Burnham on Crouch in 1963

After the 1963 freeze-up... **not one adult or larva was sampled....BUT**

Eric Edwards kept brown crab in tanks, & showed me moulting & mating

1964 swotted for a MAFF post-grad studentship in fisheries research

THE OPEN SEA

SIR ALISTER HARDY

PART I: THE WORLD OF PLANKTON

"Indispensable to all who are interested in the sea. No comparable book has been published in this generation."

Professor C. M. Yonge, Guardian

"One of those works which, by covering ground never before described in a popular manner, open new doors of knowledge to the reading public."

"Professor Hardy's book is not only authoritative but enthralling. He is a charming as well as a dependable pilot through this fascinating subject."

"This magnificent book is full of the moving life of the sea in all its complexity. Little has escaped Professor Hardy's tow-net, but the reader will not be stunned by science. The writing flows naturally, is never obscure and has an intimate engaging quality."

Observer

PART II: FISH AND FISHERIES

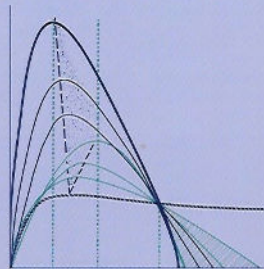
"The Open Sea will surely rank as one of the world's scientific masterpieces. He is a superb writer. He has the gift of conveying to his reader his own enthusiasm for his subject. He is also a fine draughtsman and water-colour artist, and his paintings of fish are exquisite."

"Sir Alister Hardy carries lightly his great knowledge of marine life and expresses it so lucidly that the non-expert reader becomes at once absorbed. Over the whole subject he throws a warm glow of informative enthusiasm. The volume consists of fascinating and for the non-expert largely unfamiliar fact, clearly observed and recorded with communicated pleasure."

Sunday Times

Raymond J.H. Beverton
and Sidney J. Holt

On the Dynamics of Exploited Fish Populations



Beverton & Holt: The fisheries bible
Very informative text, rather scary maths !

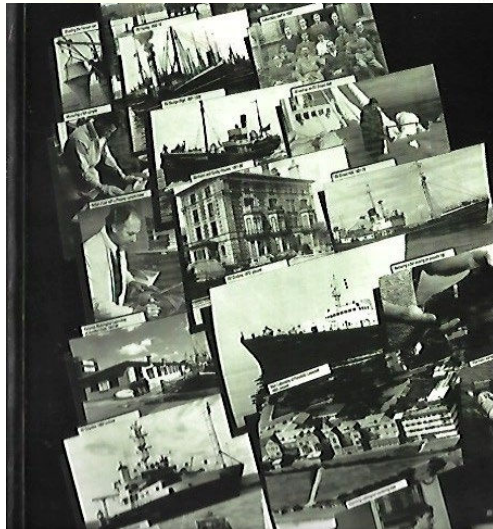
$$Y_W = FRW_0 e^{-M_0} \sum_{n=0}^{\infty} \frac{Q_n e^{-nK(t_f - t_0)}}{F + M + nK} \left(1 - e^{-(F + M + nK)\lambda} \right)$$

$\lambda = t_k - t_f = \text{the fishable life-span}$

my MAFF/Cefas career home 1964-2004 Lowestoft Fisheries Lab (Ex-Grand Hotel)



Heir to a
distinguished
MAFF history
since 1902



The MAFF/Cefas path that shaped me

1964 Autumn *Arctic Corsair* trip to Bear Island & Spitzbergen

‘Initiation & Inspiration’



1964-81 Flatfish surveys & ICES assessments (Iceland & North Sea)

‘Midshipman then Lieutenant’

1975-77 Brussels battles : formative experience explaining ICES advice to new pre-CFP fish team

‘Lieutenant Commander’

1982-99 Head of the Shellfish Team: totally new experience, learned from a great team, upgraded the R&D, numerous crises, push for sustainability
Good links with Fisheries team in Whitehall, but limited actions.

‘Captain’

2000-2004 Headed 40 + Fish Assessment Team; Senior Fisheries
Advisor reporting to Deputy Director

‘Commodore’



Learnings



Arctic Corsair: Inspirational (Fishing News article Trojans of the Arctic):
pullly-haully, gear fraps, long days, poor fishing, plankton patterns

Iceland & North Sea flatfish studies:

UK distant water fishing killed by cod wars and 200-mile limits

North Sea fisheries expanded during short lived “Recruit Outburst”

16 N Sea flatfish “bus stop” surveys, tagging, my first ICES assessments

My Brussels battle: explaining ICES advice to pre-CFP fish team:

NEAFC failed to counter N Sea herring collapse so ICES advised closure

**Resisted strong pressure to dilute the advice, so fishery was closed in Dec ‘76*

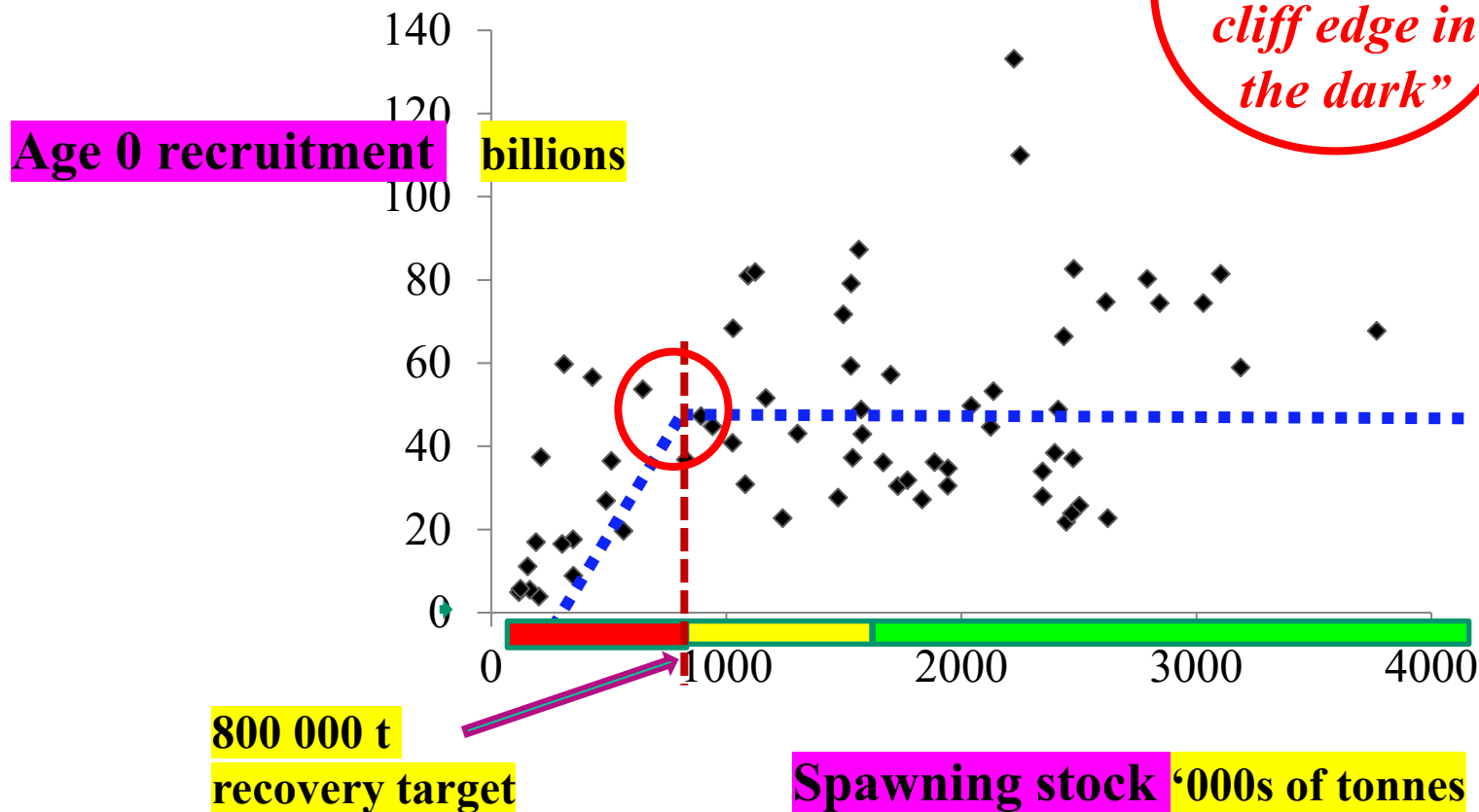
The Shellfish period:

Bonamia in oysters; cockle, mussel, oyster stock surveys; lobster/crab study areas, assessments, management proposals; lobster re-stocking & recapture; lobster & scallop ageing methods. chair of ICES shellfish, natural resources & Consultative Committees

The Senior Fish stock advisor period:

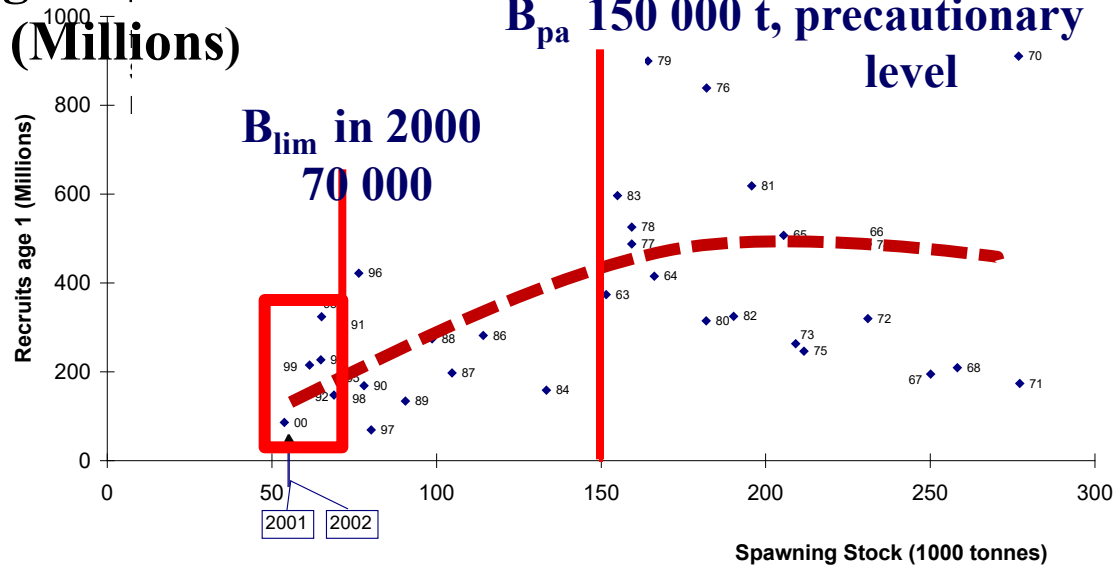
Cod crises, “2 x 50% cuts in N Sea TAC at a stroke: Irish Sea box and Zero TAC, preparation for N Sea Recovery Plan

The North Sea herring in 1976



North Sea Cod Stock-Recruitment

Age 1 Recruits
(Millions)



SSB Spawning Stock Biomass (kilo tonnes)

Solutions are hard to achieve in the real world

Complex scientific, political & regulatory steps

National Data & Analysis

International Scientific Council
(ICES Copenhagen)

independent asse.  **ICES**
and data-based advice **CIEM**



Regulatory Body

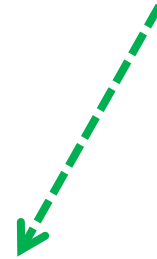
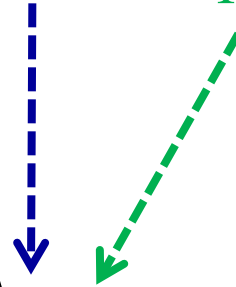
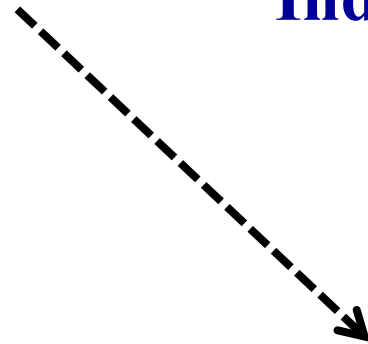


- annual merry go round
- 11th hour decisions



Industry

NGOs



National Officials
& Ministers



Regulations &
Enforcement



The N Sea Herring stock recovered, and the fishery re-opened after 8 years.....but the old industry had gone & the benefit was delayed to a new generation.

The savage cuts in N Sea cod TAC's

2000	81.0 kt
2001	48.6 kt
2002	49.3 kt
2003	27.3 kt

I pledged to myself to avoid such scenarios in the future.

The Shellfish Portfolio. Learnt from scratch:-fantastic team, diverse species, locations, habitats, life history & dynamics, capture & survey methods, assessments, management measures.

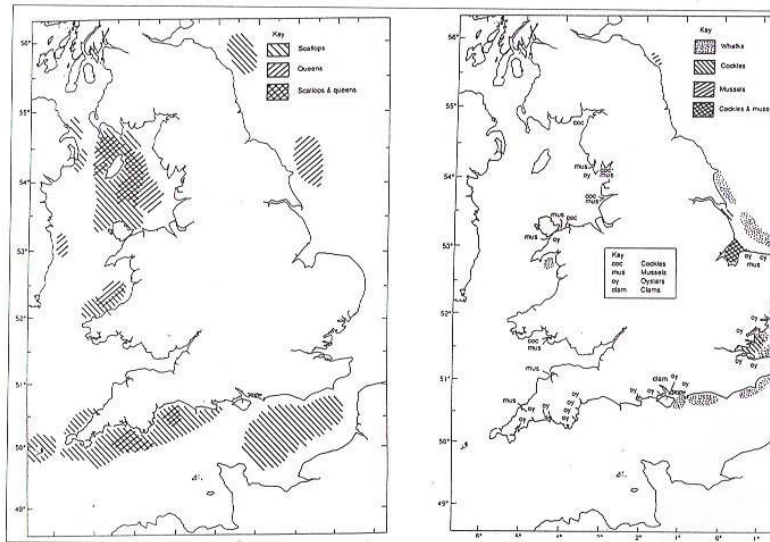
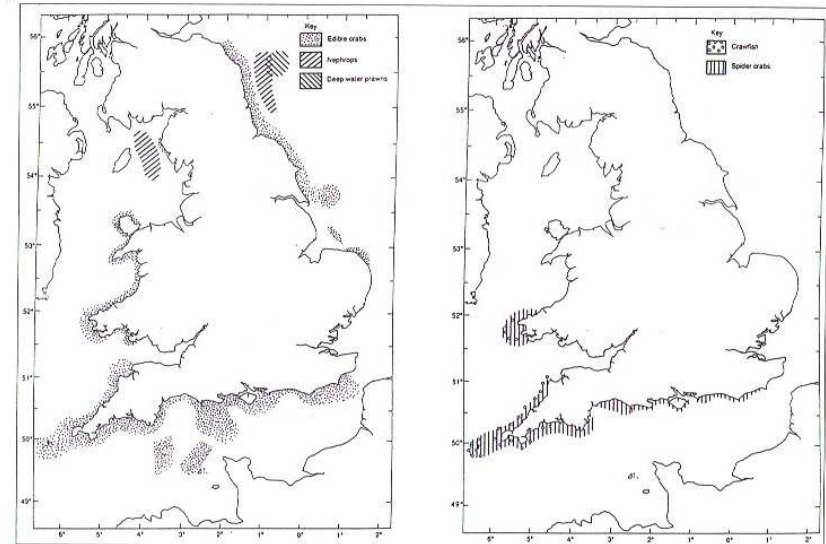


Fig. 14. Location of the main mollusc fisheries

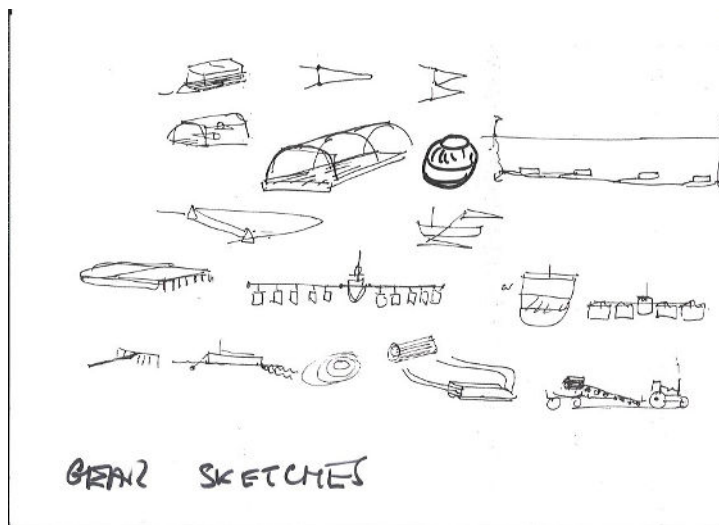
CEFAS, Lowestoft



THIRTIETH ANNUAL SHELLFISH CONFERENCE 1999

crabs, crab and crawfish fisheries

CEFAS, Lowestoft



DR WALNE MEMORIAL LECTURE A REVIEW OF SHELLFISH RESOURCES AND THEIR MANAGEMENT

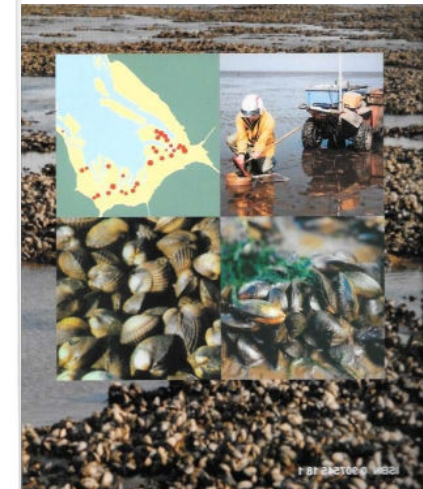
By
Dr Colin Bunnister
CEFAS, Lowestoft Laboratory, UK



The Shellfish Association of Great Britain
Fishmongers' Hall, London Bridge, London EC3R 9ET.



The Shellfish Association
of Great Britain





Happy Days Bridlington Bay sampling

Debbie C
summer
sampling
stations

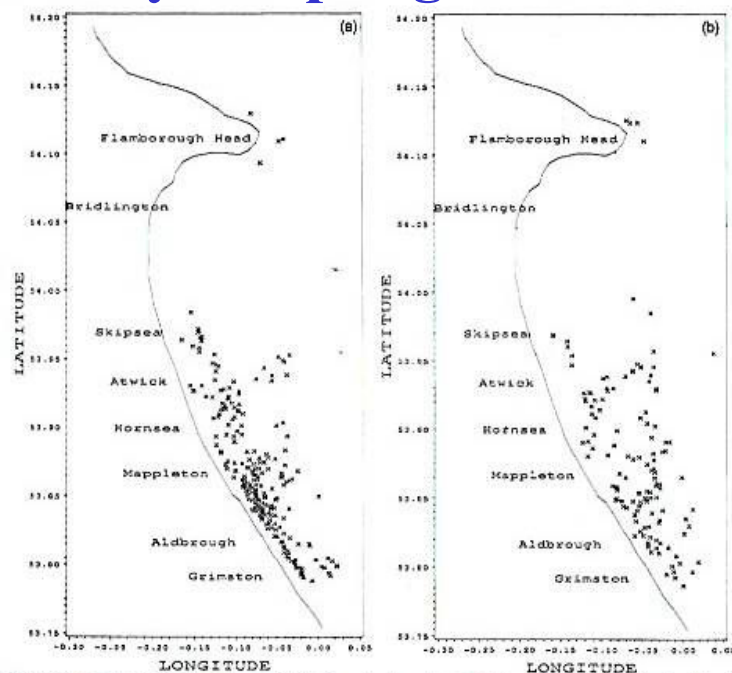


Figure 6. Position of individual hauls from vessel A for the sea-based sampling. (a) Hauls containing no berried females, (b) hauls containing only legal-sized berried females, and (c: overleaf) hauls containing only sub-legal berried females.



Recovery of hatchery
reared lobsters from
cobble

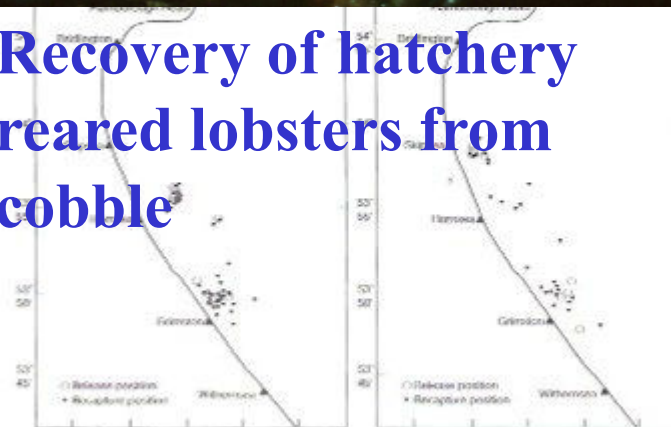
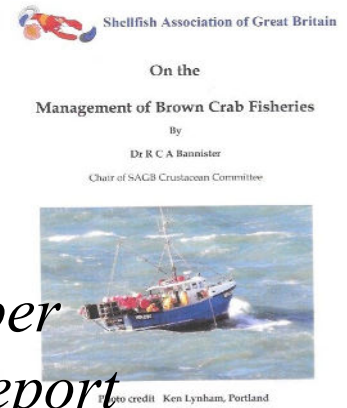


Figure 3. Comparison between lobster release and recapture sites for the 1984 and 1985 cohort hatchery-reared lobsters (*Homarus gammarus*) released into Bridlington Bay, eastern England. (F. Bannister et al., 1994a.)

SAGB & FishHall

My Second home: 2006 - present day

Pundit & Preacher



- *Peter Hunt & the Council appointed me Hon Life Member*
- *EU grant for Shellfish Industry Development Strategy report*
- *Report devising a National Shellfish Advisory Committee*
- *2009 SAGB Crab Report: still a valid repository, but out of print*
- *Chair of Crustacean Committee for several years before Mike Roach*
- *A dozen or so largely fruitless regional, & Defra meetings on crab & lobster management*
- *Chair of SAGB Council at the time of the move from Fish Hall*
- *So many wonderful SAGB members, from Jeremy Simmonds onwards*
- *2020 Fisheries Act...the long hoped-for game changer ...but is it ?*
- *Shellfish Industry Advisory Group*
- *Crab & lobster Management Grp, Crab & lobster science group*
- ***A heartfelt TRIBUTE TO DAVID JARRAD & the Admin Team***
huge pressures...many past & new issues + welfare+ exports+ad fin

And The Challenges Remain

The **Unchecked** rise in regional Potting

1960s-90s



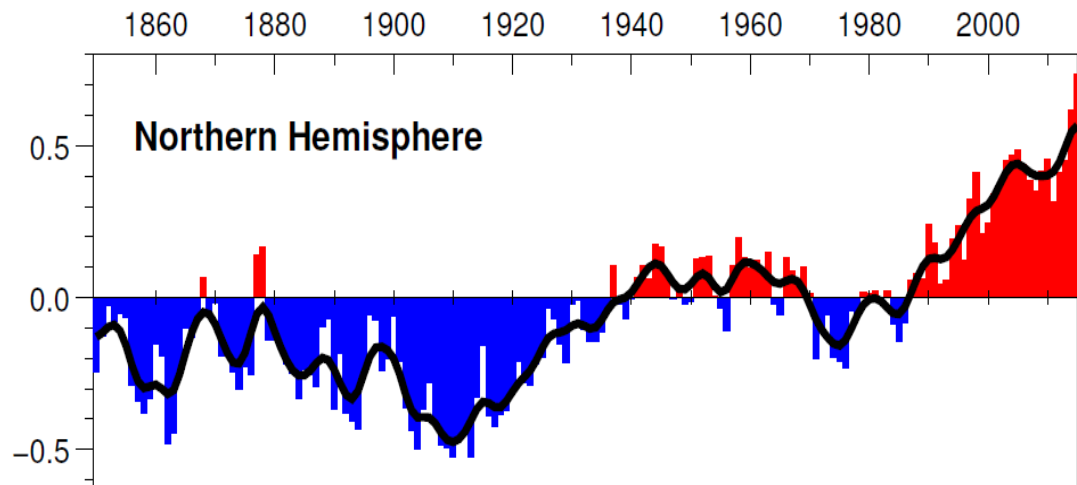
1980s-now



2017- →



...& the hemispheric seawater **temperature anomaly rises, rises...**



Finally, it gets harder to keep up, and how long have I got left ?
Will the Crab & Lobster Management Grp end successfully & in
time ? Or is it another false dawn ?

If you are not an SAGB member, then do please join and find out



Acknowledgement: most of the photos were taken on
past official business, so probably belong to the Crown.

*Grateful thanks to many fab colleagues past & present,
& my Scots doctor mum who championed early diagnosis,
& my Presbyterian father...which is no doubt why I preach a lot !!
Thank you all, and especially to Gary Hodgson, David & the Team*