

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1988 RV PROGRAMME

REPORT : MV BALAENA CHARTER

(PROVISIONAL : Not to be quoted without permission of the author)

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DURATION : 19-22 October, 1988

LOCATION : R Medway, Kent

AIMS:

1. To estimate the abundance of 0 group/juvenile bass in the R. Medway, especially in the vicinity of Kingsnorth power station.
2. To describe the distribution, movement and length distributions of 0 group/juvenile bass in the area.
3. To estimate the daily mortality rate of 0 group bass (due to entrainment on the cooling-water intake screens) at Kingsnorth power station using dye-marked fish.
4. To collect biological samples of bass for growth studies.

NARRATIVE:

This was the first of three planned charter trips using the MV BALAENA. The Medway river and main creeks between Grain and the Medway Bridge at Cuxton were surveyed for bass using fine mesh trawls. Fish from four geographically separated areas were marked differently using Alcian blue dye, administered using a Pan-jet.

Four static fish traps were deployed in the hot-water outfall lagoon at Kingsnorth power-station on 18 October, and monitoring of these and of bass appearing on the cooling-water intake screens commenced on October 21st. This part of the programme is ongoing and a separate report will be produced.

RESULTS:

Very few bass were caught away from the warm-water discharge in East Hoo creek. The disposition of catches by area was as follows:

1. Upstream of Kingsnorth: 5 tows (47 mins) - 5 bass, marked single, blue, left and released.
2. Kingsnorth area: 9 tows (155 mins) - nil bass.
3. Downstream of Kingsnorth: 15 tows (233 mins). 11 bass, 10 marked single, blue, right and released.
4. Areas outside of marking areas as 1 to 3 above: 2 tows (35 mins) nil bass.
5. East Hoo/Damhead Creek (warm water outflow) 15 tows (171 mins). 1,211 bass

of which 781 were marked double, blue, left and released in the creek, and 92 were marked double, blue, right and used to seed the screens inlet area. Additionally 46 golden grey mullet (*Liza aurata*) were marked blue, left and released.

Surface temperature was monitored continuously throughout the trawl survey, and temperature/salinity profiles were taken at each trawl station.

Of the total of 1227 bass caught, 34 fish were between 16.0cm and 29.5cm total length, the remainder all being less than 13.0cm total length.

No gear damage was sustained during the survey. Further trawl surveys will be conducted during November and December.

D Eaton  
26 October 1988

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DISTRIBUTION

Basic list+

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