

State of California - The Resources Agency
Department of Fish and Game
Marine Resources Region
Long Beach, California

CRUISE REPORT 71-S-8 CRAB

Prepared by Nancy E. Nelson

- Vessel: N. B. SCOFIELD
- Dates: Departed San Pedro - October 18, 1971
Returned San Pedro - November 18, 1971
- Areas: Coastal waters from False Cape to Oregon border.
- Objectives:
1. To determine the relative abundance of incoming year class market crabs, *Cancer magister*.
 2. To verify the findings of previous depth distribution cruises.
 3. To tag crabs caught at depths of 80 fathoms or more.
 4. To obtain samples of ocean shrimp, *Pandalus jordani*, whenever possible.
 5. To collect juvenile Dover sole for the Bottomfish Project.
- Operations: Trawling with a 41-foot head rope semi-balloon gulf shrimp trawl with 3/4 inch mesh, was conducted along 8 transects between False Cape and Pelican Bay (Figure 1). Between 10 and 50 fathoms, trawls were made at 5 fathom intervals; beyond 55 fathoms the interval was increased to 10 fathoms.
- Results: A total of 73 trawls caught 11,179 crabs, of which 99% (11,111) were 1971 year class crabs. The remainder of the catch consisted of 50 legal and 10 sublegal males, and 8 females. No crabs were caught in water deeper than 40 fathoms. Most of the legal crabs caught were in better condition than at the same time last year.

Catch data from fall cruises of the last three years are presented below; for comparison purposes, only tows between 10 and 50 fathoms are included:

| Year | Tows | Total Crabs | Juveniles | Legals | Sub-legals | Females | Commercial Landings Season | Million/lbs. |
|------|------|-------------|-----------|--------|------------|---------|----------------------------|--------------|
| 1969 | 35 | 1,638 | 439 | 640 | 476 | 719 | 1969-70 | 14.1 |
| 1970 | 25 | 11,427 | 11,306 | 70 | 49 | 2 | 1970-71 | 7.6 |
| 1971 | 61 | 11,179 | 11,111 | 50 | 10 | 8 | 1971-72 | ? |

It appears that legal crabs are present in relatively low numbers for the second year in a row, and the outlook for the 1971-72 commercial season is poor.

Ocean shrimp samples were obtained on 11 tows.

Eighteen (18) small rex sole (5-10 inches) were preserved for examination of abnormalities, which have been tentatively identified as papillomas. Of the 18 fish, 11 were caught in one tow southwest of Crescent City in 40 fathoms.

Personnel:

Anthony Black, Vessel Captain
Nancy Nelson, Biologist-in-charge
C. Blunt, Biologist - October 22, 30, 31; November 15
C. Coomers, Project Transition, U.S.N.
C. Kalb, Seasonal Aid - October 23, 26, 30, 31.

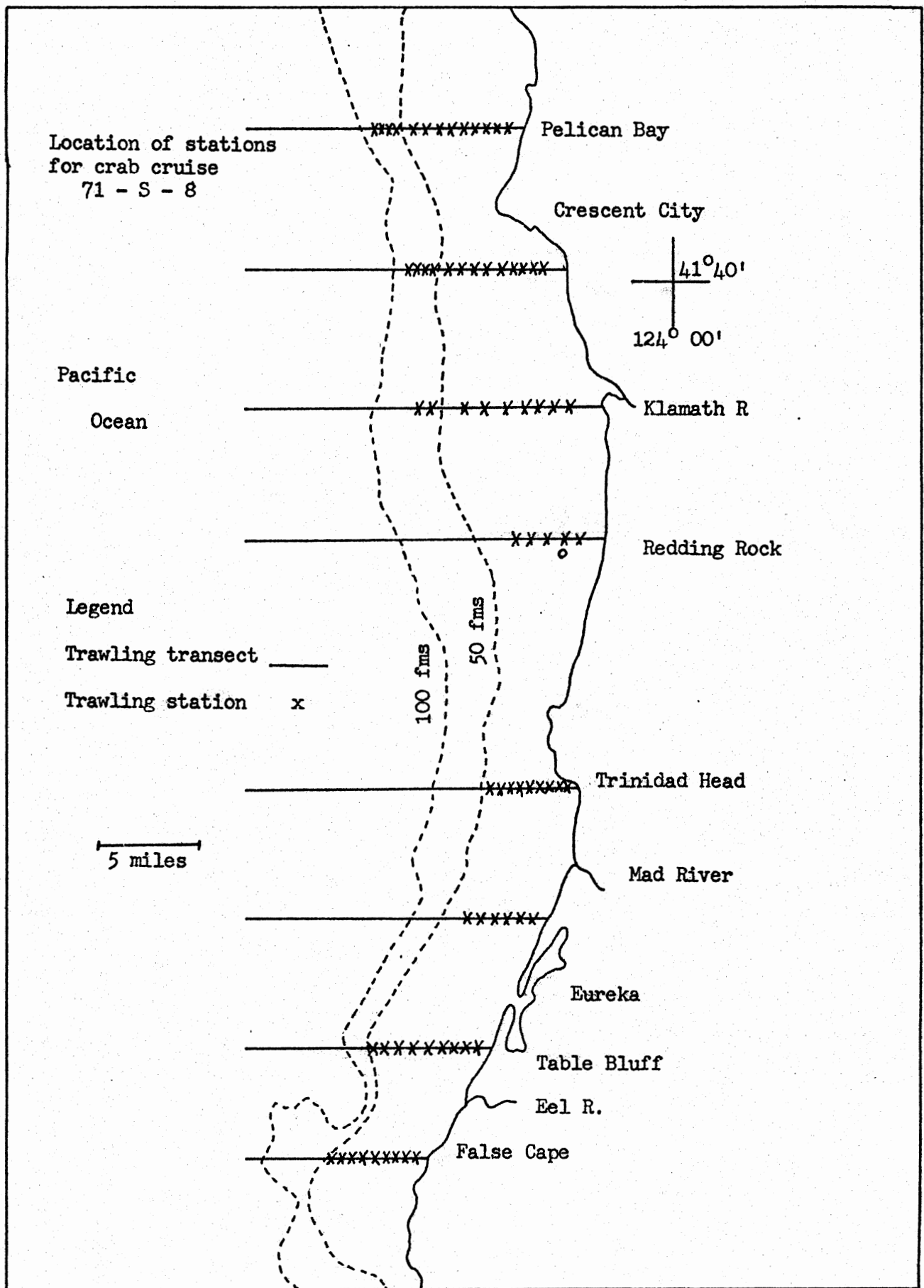


Figure 1