Preliminary 2008 pre-season survey data summary

Industry Survey Data
May and June 2008

Julian Harrington, Jayson Semmens, Malcolm Haddon
TAFI – MRL, University of Tasmania

Tasmanian Aquaculture & Fisheries Institute
University of Tasmania

Australian Government
Fisheries Research and Development Corporation
Australian Fisheries Management Authority
Figure 1: The location of sample tows conducted to the west of Flinders Island and within the Bridport / Cape Portland regions (left). The abundance of scallops caught within each sample tow (kg of scallops) is shown in the figure to the right. Only five scallops were measured in the region between Waterhouse Island and Cape Portland (all between 82 and 89 mm). The arrows indicate the general locations of sample tows located to the West of Flinders Island that contributed to the length frequency diagram in Figure 2.
Figure 2: Length frequency histogram for scallops caught to the west of Flinders Island (indicated by arrows in Figure 1). The vast majority of scallops caught within this region were undersize, with a discard rate of approximately 95%.
Figure 3: The location of sample tows conducted within Banks Strait, the Potboil and Babel Island regions near Flinders Island (left). The abundance of scallops (kg of scallops) caught within each sample tow is shown in the figure to the right.
Figure 4: Length frequency histogram for scallops caught near Babel Island. To the east of Flinders Island (see Figure 3). The vast majority of scallops caught within this region were undersize. The discard rate was 81%.

Figure 5: Length frequency histogram for scallops caught within Banks Strait (see Figure 3). The discard rate is 4%. Note the different max. diameter scale bar from figure 4.
Figure 6: The location of sample tows conducted within Eddystone Point, Ansons and Binalong Bays and near St. Helens Island. (left). The abundance of scallops (as kg of scallops) caught within each sample tow is shown in the figure to the right. Scallops were reported as being in very poor condition (similar to that evidenced during the 2006 and 2008 seasons. These may improve condition later in the season.
Figure 7: Length frequency histogram for scallops caught within Eddystone Point (see Figure 6). The discard rate is 21%.

Figure 8: Length frequency histogram for scallops caught near Ansons Bay (see Figure 6). The discard rate is < 2%.
Figure 9: The location of sample tows conducted within the Long Point, Bicheno and Friendly Beaches regions (left). The abundance of scallops (as kg of scallops) caught within each sample tow is shown in the figure to the right. The condition of scallops reported from these regions was good, with large meats and developing roes.
Figure 10: Length frequency histogram for scallops caught in the region to the south of Long Point (see Figure 9). The discard rate is 3%.

Figure 11: Length frequency histogram for scallops caught in the region near Bicheno (see Figure 9). The discard rate is 1%. Note the different max. diameter scale bar compared to figure 10.
Figure 12: The location of sample tows conducted within White Rock (left). The abundance of scallops (number of scallops) caught within each sample tow is shown in the figure to the right. It must be noted that this some of this work was conducted as part of a longer term study looking at the recovery of scallop habitat after commercial fishing. Bad weather conditions and time restrictions prevented further exploration during this survey.
Figure 13: Length frequency histogram for scallops caught in the region near White Rock (see Figure 12). The discard rate is 71%.

Figure 14: Length frequency histogram for scallops caught within Fossil Cliffs and South Shouten Island regions (see Figure 12). The discard rate is ~ 1%.
Figure 15: The location of sample tows conducted within Marion Bay (left). The abundance of scallops (as kg of scallops) caught within each sample tow is shown in the figure to the right.
Overview:

This report provides preliminary data obtained before the 16th July 2008 from surveys conducted during the 2008 pre-season industry-based surveys. It should be noted that the strategy of providing monetary and research quota that could be caught during the pre-season survey period appears to be an effective strategy during predicted poor seasons. It is hoped that the three vessels that participated in the surveys (Brid Venture, Brid Voyager and the Alexander Vanessa) will recoup the costs of conducting surveys.

Possible commercial options for the 2008 scallop season

Based purely on the discard rate criteria and a reasonable coverage / number of sample tows being conducted within a survey area, several regions could be considered for commercial harvest during the 2008 season.

- Banks Strait (Figures 3, 5)
- Eddystone Point (Figures 6, 7)
- Sth Long Point (Figures 9, 10)
- Bicheno (Figures 9, 11)
- Shouten Island / Fossil Cliffs (Figures 12, 14)
- Marion Bay (Figures 15, 16)

The majority of these regions have been commercially fished during at least one fishing season since 2003, and in general, the scallops found have been left from these commercial operations. Subsequently, scallop abundances are predicted to be relatively low. The remaining regions cover relatively small areas.

**Figure 16**: Length frequency histogram for scallops caught in the region near Marion Bay (see Figure 14). The discard rate is 5%.
Possible commercial options for future scallop seasons

Two regions have shown signs of significant recruitment.
- Babel Island / east Flinders (see Figs. 3, 4).
- White Rock (see Figs 12, 13).

For both areas, further industries surveys are needed to a) better map the extent of the beds and b) determine when they can be harvested.