OVERVIEW

Golden Crab Committee

June 8, 2009 555 NE Ocean Boulevard Stuart, Florida

At this meeting of the Golden Crab Committee, the Committee needs to: (A) receive an update on meetings with golden crab fishermen and B) review options for OFL and ABC and provide direction to staff.

A. Summary Report of a Meeting with Golden Crab Fishery Participants

At the December 2008 meeting of the Limited Access Privilege Program Committee, Council staff relayed a request from three Golden Crab fishermen for a meeting with Council staff to discuss a possible Limited Access Privilege program for the South Atlantic Golden Crab fishery. The LAP Program Committee requested that Tony Iarocci and Kate Quigley speak with the golden crab fishermen to find out why they would like to consider a LAP program. In February 2009, at the request of three golden crab fishermen, all permit holders were invited to attend an industry meeting to learn about LAPPs and discuss the potential benefits and drawbacks of LAPP management for the golden crab fishery. A mailing with all meeting materials, a summary and timeline was sent to each permit holder. As a result of this meeting a letter was sent to the Council requesting consideration of a LAP program for this fishery.

At the March 2009 Council meeting, the Council approved beginning work on a Golden Crab LAP Program Amendment. In May 2009, Council staff and Environmental Defense Fund met with three golden crab fishermen at their request to learn more about LAP management in preparation for the meeting of the golden crab AP at this Council meeting.

Background Information on Golden Crab (prepared by Kate Quigley)

The Golden Crab Fishery Management Plan went into effect beginning on August 27, 1996 and established three golden crab fishing zones. The Northern Zone is defined as the EEZ north of 28 degrees N. latitude. The Middle Zone is contained within the EEZ between 25 degrees North and 28 degrees North latitude. The Southern Zone extends south from 25 degrees North latitude within the South Atlantic Council's EEZ. Federal permits are issued for a specific zone and fishing is allowed only in that zone for which the permit is issued.

In the South Atlantic region initially 35 vessels were granted permits to operate in this fishery: 27 permits were issued for the southern zone; 6 permits were issued for the middle zone; and 2 permits were granted to vessels for the northern zone. Other management regulations imposed by the golden crab FMP included: dealer and vessel permitting and reporting; limitations on the

size of vessels; prescribing allowable gear (including escape gaps and escape panels); and prohibiting possession of female crabs (see the FMP for a complete list of measures).

Number of Participants

The number of permit holders that land golden crab has fluctuated from year to year (**Table 1**). The greatest number of vessels making landings since 1995 was 14 (**Table 2**). In recent years, only 5 to 6 vessels have landed any golden crab. The majority of vessels currently fishing for golden crab have Middle Zone permits. In 1997, 1998, and 2000, there were more vessels fishing for golden crab with Southern Zone permits than Middle Zone permits. Only in 2006 and 2007 have vessels with Northern Zone permits participated in the fishery.

Table 1. Numbers of active permit holders and vessels landing golden crab, 1995-2007. Source: SEFSC, 2008.

Year	Permit Holders	Vessels Making Landings		
1996	34	4		
1997	35	14		
1998	29	14		
1999	11	8		
2000	10	10		
2001	8	6		
2002	12	7		
2003	14	6		
2004	12	5		
2005	11	5		
2006	12	6		
2007	11	6		

Table 2. Number of vessels making landings by Zone, 1995-2007.

Source: SEFSC, 2008.

Year	Northern	Middle	Southern
1995	confidential	confidential	confidential
1996	confidential	4	confidential
1997	confidential	5	9
1998	confidential	7	7
1999	confidential	6	confidential
2000	confidential	4	6
2001	confidential	4	confidential
2002	confidential	5	confidential
2003	confidential	5	confidential
2004	confidential	confidential	confidential
2005	confidential	5	confidential
2006	confidential	4	confidential
2007	confidential	5	confidential

Information on the golden crab fishery participation was taken from logbook data (SEFSC 2008), and Accumulative Landings System (ALS) data.

Annual and Monthly Landings

Total landings and landings by zone of golden crab are shown in **Table 3**. **Figure 1** shows these data in chart form. Golden crab landings reached a peak of over 1 million pounds in 1997. Since then, landings have averaged about 550,000 pounds annually. However, the trend shows an average of 665,000 pounds from 1998-2002 and 355,000 pounds from 2003-2006.

The overwhelming majority of landings in recent years have come from the Middle Zone (90-100%) (**Table 3**). However, historically, a significant portion of landings came from the Southern Zone (up to 36%). Only in the past two years have any landings at all come from the Northern Zone. Landings from the Middle Zone have averaged around 470,000 pounds since 1996 with a high of about 662,000 pounds in 1997. Landings from the Southern Zone were significant 1997 through 2001. Landings peaked at about 373,000 pounds in 1997.

Table 3. Landings of golden crab by Zone, 1995-2007.

Source: SEFSC, 2008.

Year	Northern Zone	Middle Zone	Southern Zone	Total
1995	0	confidential	confidential	61,660
1996	0	523,160	0	523,160
1997	0	661,896	372,551	1,034,447
1998	0	361,480	156,836	518,316
1999	0	confidential	confidential	682,224
2000	0	584,130	257,617	841,747
2001	0	confidential	confidential	781,138
2002	0	confidential	confidential	500,774
2003	0	confidential	confidential	359,087
2004	0	confidential	confidential	278,336
2005	0	432,846	0	432,846
2006	confidential	566,780	confidential	599,374
2007	confidential	confidential	0	502,292

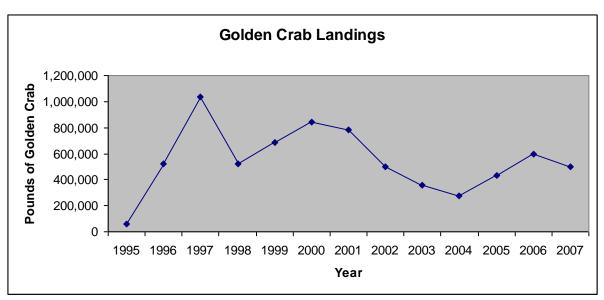


Figure 1. Landings of Golden Crab, 1995-2007.

Source: SEFSC 2008.

Figure 2 shows monthly golden crab landings from 2003 to 2007. Golden crab landings have varied widely from month to month over the past 5 years. In general, more golden crab are landed from May to December than in the first half of the year due to Keys fishermen entering the fishery in the second half of the year after the spiny lobster season winds down. On average, from 1996 to 2007, 45% of total golden crab landings were made between January and May while 55% of landings were made between May and December.

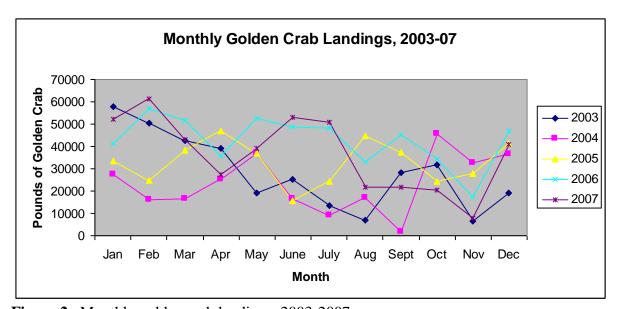


Figure 2. Monthly golden crab landings, 2003-2007.

Source: ALS data.

B. OFL & ABC OPTIONS

I. Overfishing Level (OFL)

- a. **Option 1. No action.** The Maximum Fishing Mortality Threshold (MFMT) = the fishing mortality rate that produces maximum sustainable yield (F_{MSY}) (Golden Crab Amendment 3). The Minimum Stock Size Threshold (MSST) is defined as a ratio of current biomass ($B_{CURRENT}$) to biomass at MSY or (1-M)* B_{MSY} , where 1-M should never be less than 0.5 (Golden Crab Amendment 3). Golden crab would be overfished if current biomass was less than MSST and would be recovered when current biomass ($B_{CURRENT}$) was equal or greater than the biomass at MSY.
- b. **Option 2. OFL** = $\mathbf{F}_{MSY} = \mathbf{0.7047}$ based on annual catch data (Harper, Eyo, and Scott, 2000; Table 6).
- c. **Option 3. OFL** = \mathbf{F}_{MSY} = **0.2055** based on quarterly catch data (Harper, Eyo, and Scott, 2000; Table 5).
- d. **Option 4.** Others??

II. Allowable Biological Catch (ABC)

- a. Option 1. No action. There is no ABC specified for golden crab.
- b. **Option 2.** ABC = 2 million pounds. This is 500,000 pounds less than MSY Alternative 3 (2.5 million pounds).
- c. **Option 3.** ABC = 1.5 million pounds. This is 1,000,000 pounds less than MSY Alternative 3 (2.5 million pounds).
- d. **Option 4.** Others??

The SSC may provide some preliminary recommendations at their meeting. If not, we would like some guidance from the committee on whether these alternatives represent a reasonable range of alternatives for analysis.