



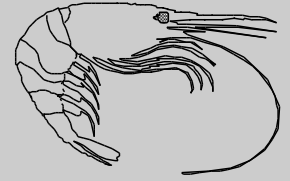
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# Annual Pink Shrimp Review

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**TO: OREGON SHRIMP INDUSTRY**  
**FROM: Bob Hannah and Steve Jones**  
**Subject: Opening of 2013 Commercial Fishery**  
**Date: 1 March 2013**

The 2013 pink shrimp (*Pandalus jordani*) season will begin on 1 April and will extend through 31 October. This newsletter provides a summary of the 2012 season for your review including catch, effort and market sample information, plus possible indicators for the 2013 season. This year, we've included an important section describing a proposed "target and limit reference point based management system" plan for Oregon pink shrimp that will be crucial for maintaining Marine Stewardship Council (MSC) certification. We've also included our annual research plan, which prioritizes our research efforts during 2013 (another MSC certification condition).

### Hot Topics

- **MSC Update (Pg. 6).**
  - **Progress toward maintaining certification.**
  - **Proposed fishery management change.**
  - **Upcoming industry survey.**

### 2012 Season Summary

Initial landings of pink shrimp in the 2012 season were delayed about two weeks in April due to price negotiations, but that didn't stop shrimpers from achieving the second largest season on record. Oregon shrimpers landed 49,144,050 pounds of pink shrimp during 2012, surpassing the 2011 total of 48.3 million pounds and just beating the previous #2 spot achieved in 1989 with 49.1 million pounds (Figure 1). The season total exceeded our expectations and appears to have been a result of extremely good hold-over of age-1 shrimp from 2011 that were harvested at age-2 in 2012.

Monthly landings were far above average again in 2012, closely matching those achieved during 2011 (Figure 2). Landings during May, June and July each topped out at over eight million pounds alone. Some processors slowed delivery rates during the last two months, holding monthly totals to about six million pounds. Shrimpers indicated that they could have landed much more had industry-imposed landing restrictions (such as slowing landing rotations) not been in place this season.

The recent trend of southerly shrimp production continued during 2012. For the last three seasons, over three quarters of the total shrimp catch was harvested from the Mudhole Bed and areas south.

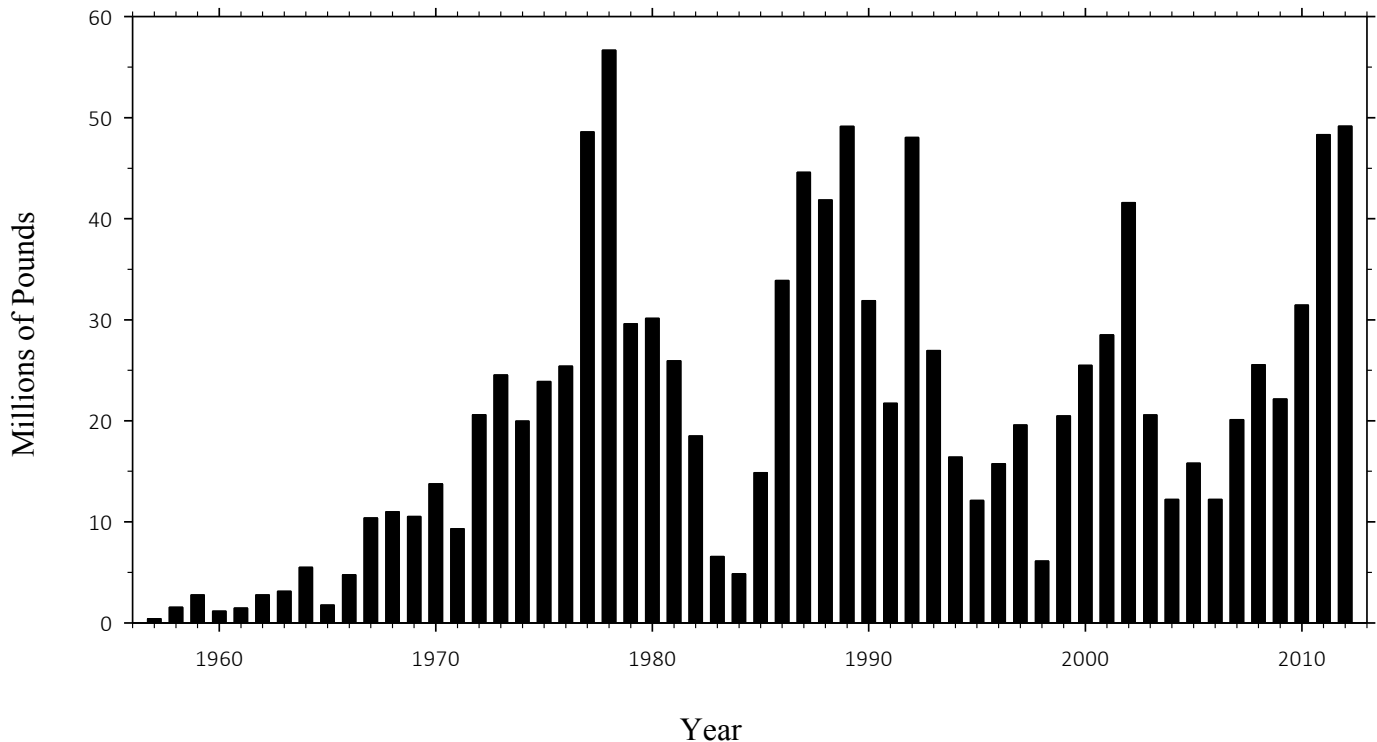
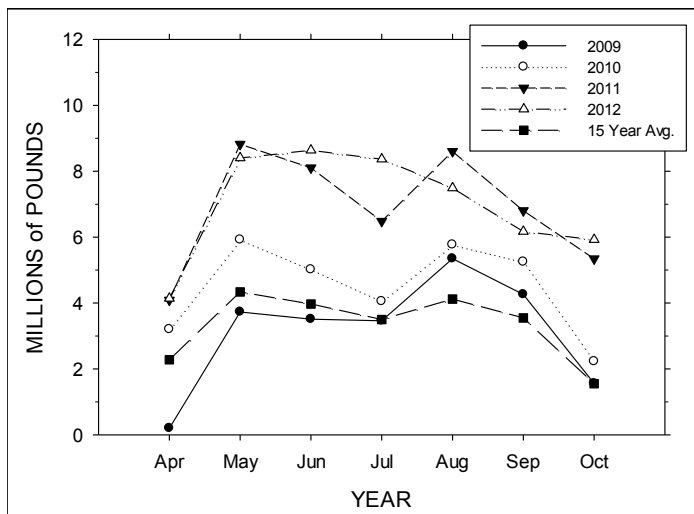
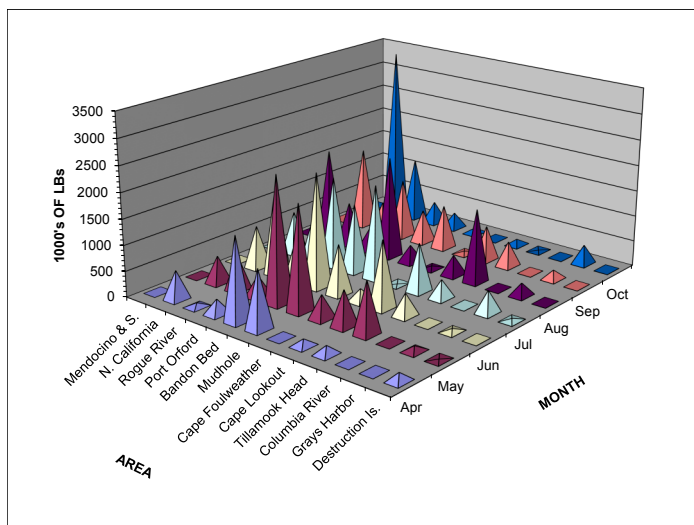


Figure 1. Oregon pink shrimp landings (millions of pounds) 1957-2012. Includes all pink shrimp landed into Oregon ports.



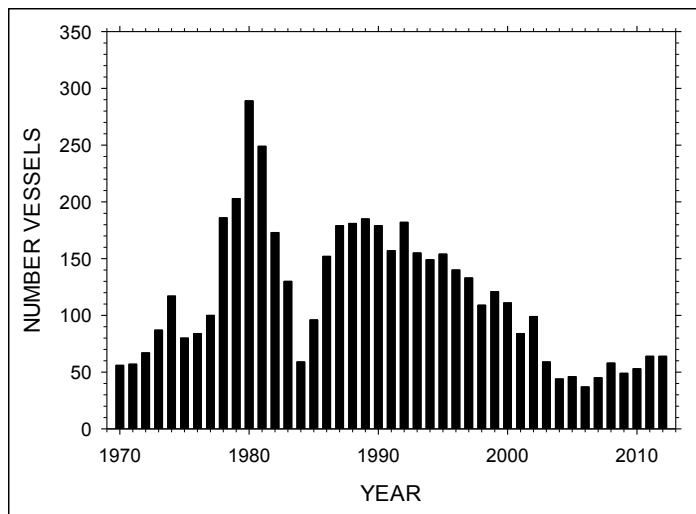
**Figure 2. Oregon pink shrimp landings by month in 2009, 2010, 2011, 2012 and the 15 year average (1996-2011).**

Monthly harvest by area was highest from the Bandon Bed and Mudhole Bed from April through about August, with areas south of the Bandon Bed producing progressively more shrimp from August through October (Figure 3). The top producing areas in 2012 were the Bandon Bed (about 10.6 million lb.) and Northern California (about 9.5 million lb.). Overall, the total harvest distribution by area in 2012 was similar to that seen in 2011, except that the Rogue River Bed produced sharply more in 2012 and production dropped from areas off Washington.

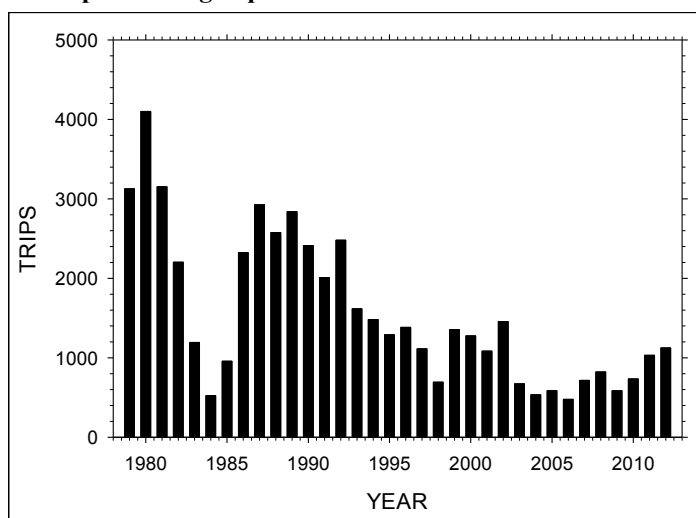


**Figure 3. Total 2012 Oregon pink shrimp landings (1000's of pounds) by month and area.**

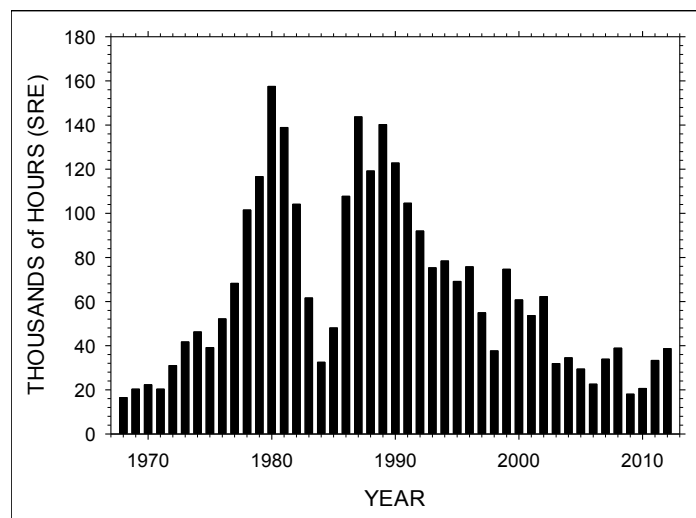
Overall fishing effort increased modestly during 2012 compared with levels expended in 2011. The number of vessels participating in 2012 remained stable at 64 vessels (Figure 4). Shrimpers put in 1,124 trips; an increase of 93 trips (Figure 5). They fished for 38,649 single-rig equivalent hours, up 5,373 SRE hours from 2011 (Figure 6).



**Figure 4. Annual number of vessels landing pink shrimp into Oregon ports: 1970-2012.**

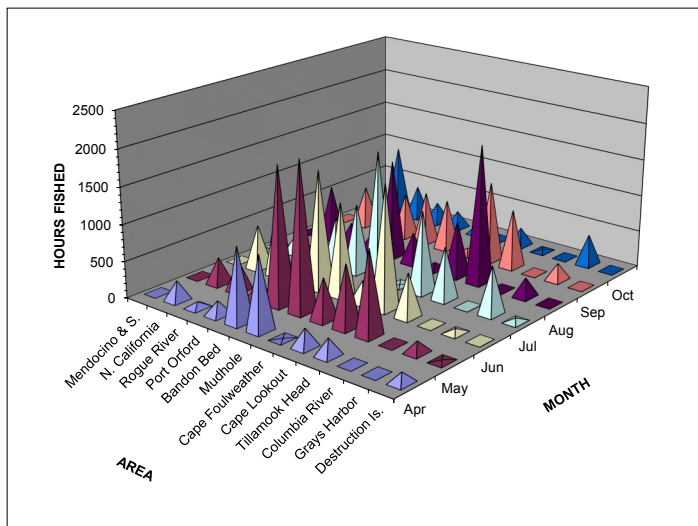


**Figure 5. Annual number of trips landing pink shrimp into Oregon ports: 1979-2012.**



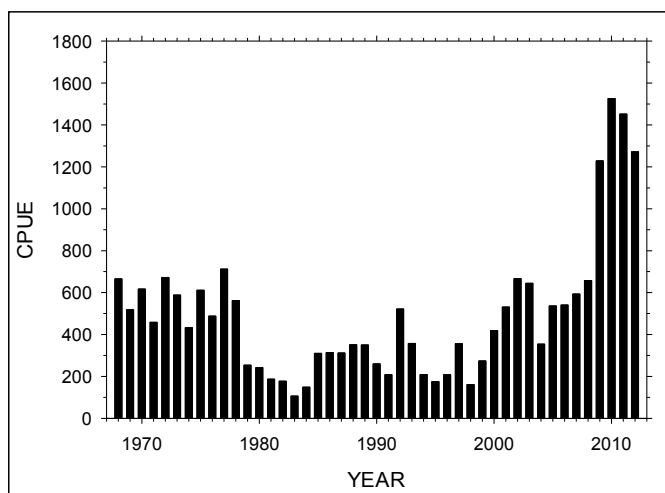
**Figure 6. Fishing effort for pink shrimp landed in Oregon, 1968-2012. Note: single-rig hours = 1.6 X double-rig hours.**

The hours fished by Oregon shrimpers were widely distributed by area and month along the Oregon coast in 2012, with a relatively small amount off Washington (Figure 7), compared to 2011. To the south, hours fished below Cape Blanco increased by about 3,000 hours in 2012. Shrimpers in northern ports spent most of their fishing time to the south instead of fishing off Washington, most likely seeking better grade shrimp.

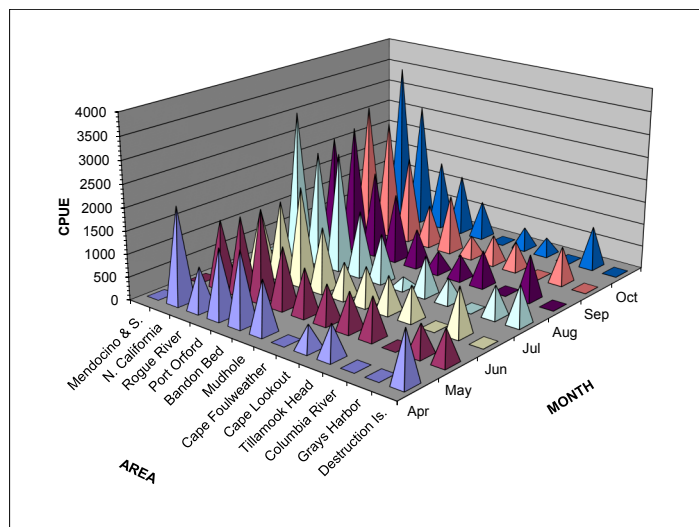


**Figure 7. 2012 Fishing effort for pink shrimp landed in Oregon by month and area. Note: 1000's of single-rig equivalent hours (single-rig hours = 1.6 X double-rig hours).**

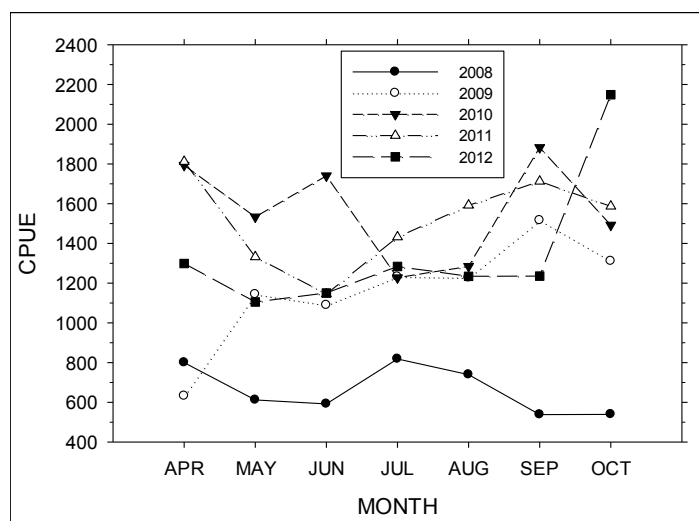
Although shrimpers caught more shrimp in 2012 than in 2011, they spent more hours with their nets on the bottom doing it. The catch rate (CPUE = lb/hour) for the 2012 season was extremely high, but it did decline noticeably from the 2011 level (Figure 8). Shrimpers fishing from the Bandon Bed and south experienced sharply higher CPUE throughout the season than those shrimping from the Mudhole and north (Figure 9). Extremely high CPUE levels occurred in beds south of Cape Blanco in the latter half of the season, with the highest CPUE occurring in the Northern California Bed during October at 3,383 lb./hour (Figure 9). Coast-wide monthly CPUE was fairly stable during 2012, except for a big jump during October (Figure 10). The jump occurred when moderate weather allowed shrimpers to target known dense shrimp concentrations off northern California, bypassing lesser concentrations.



**Figure 8. Catch-per-unit-of-effort (CPUE = lbs/SRE hour) for vessels landing pink shrimp into Oregon; 1968-2012.**



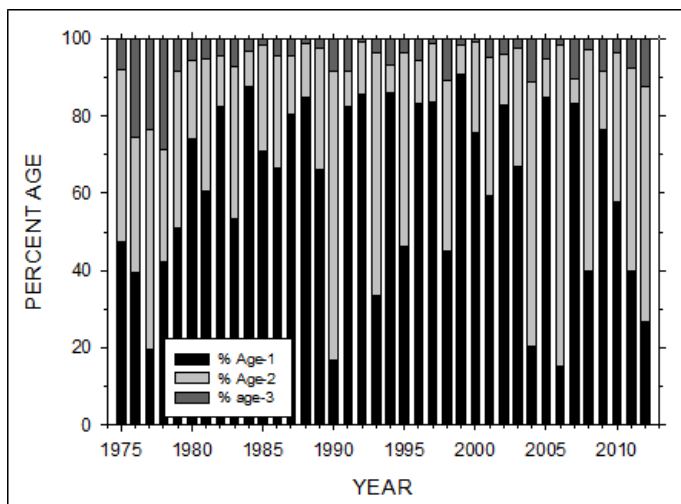
**Figure 9. CPUE (=lbs/SRE hour) of vessels harvesting pink shrimp by month and area during 2012.**



**Figure 10. Monthly CPUE (=lbs/SRE hour) for vessels landing pink shrimp into Oregon in 2008, 2009, 2010, 2011 and 2012.**

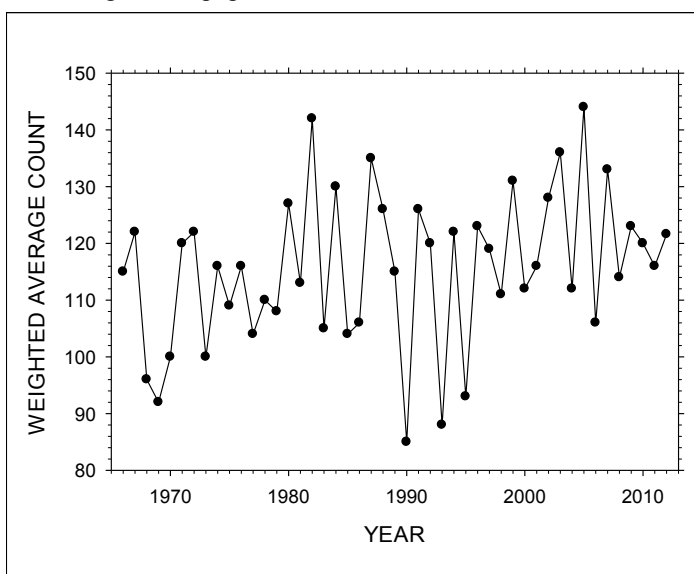
Shrimp size-at-age was on the small side for all age-classes in 2012. During April, many shrimpers commented on how small the incoming age-1 shrimp were and that the older shrimp hadn't grown much over the winter. Our market sampling results backed up their observations. Normally, pink shrimp grow faster at any age the further south they occur. For example, age-1 shrimp found off northern California during April often are large enough to make legal grade ( $\leq 160$  shrimp/lb) in their own right but are much smaller in northern areas. That's not what occurred in 2012. Age-1 shrimp found off northern Oregon were larger at-age than those found in southern areas throughout the season. We suspect that the odd size disparity from north to south was caused by density-dependent growth. The extremely large numbers of shrimp in southern areas may have been sharing relatively scarce food resources and were growing slowly as a result.

The 2012 shrimp catch was heavily dominated by age-2 shrimp, comprising 61% of the catch by number of shrimp (Figure 11). Hold-over of age-1 and age-2 shrimp from 2011 was apparently exceptional. The age-3 component of the 2012 catch was the largest seen since 1978. As in 2011, it's hard to judge the relative strength of the 2012 age components in the shrimp population based on these catch percentages. Landed shrimp are typically sold under a split-price system these days, which provides a strong incentive for shrimpers to target larger shrimp. With the exceptionally large population of shrimp available on the grounds in 2012, shrimpers found large volumes containing relatively high numbers of older shrimp. The bottom line is that the age-1 component of the total population may be larger than indicated by the harvest percentages.



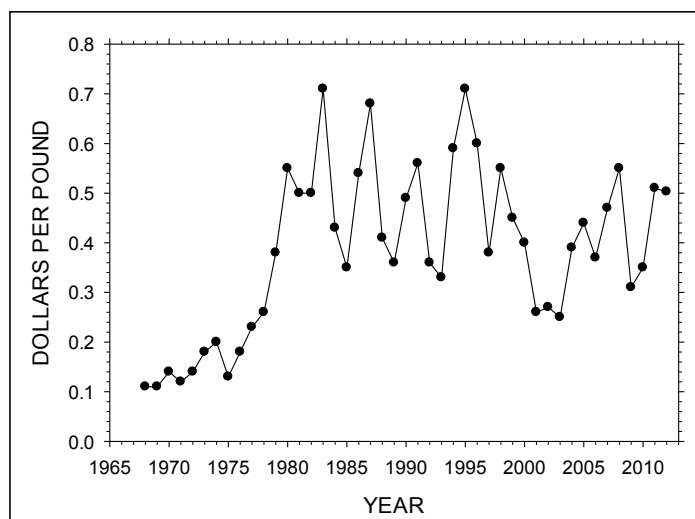
**Figure 11. Annual percent age composition of pink shrimp (#'s of shrimp) landed in Oregon, 1975-2012.**

The catch-weighted count-per-pound (count) of pink shrimp landed in Oregon during 2012 was 122 shrimp/lb, up slightly from 116/lb during 2011 (Figure 12). The count increase in 2012 occurred despite a high age-2 percentage in the catch and can probably be attributed to the relatively small shrimp size-at-age in the population.

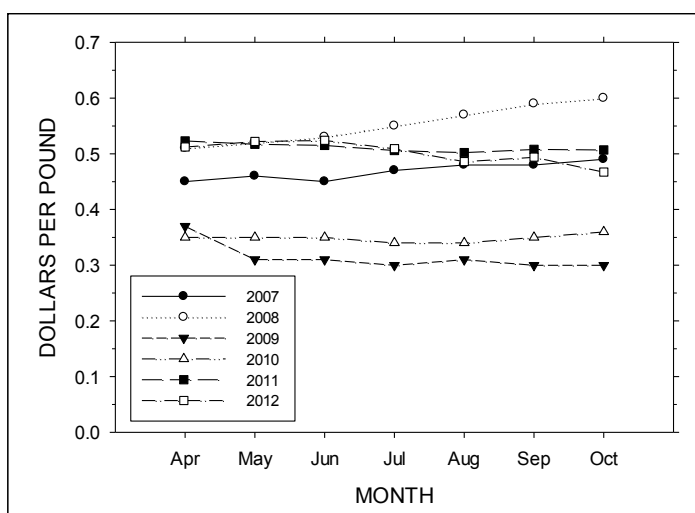


**Figure 12. Average (catch weighted) count-per-pound of pink shrimp landed into Oregon; 1966-2012.**

The average ex-vessel price per pound was \$0.504/lb during 2012, down just a fraction of a cent from \$0.51/lb during 2011 (Figure 13). Most shrimp were sold under a split-price structure based on shrimp counts. Price tiers generally ranged from \$0.30/lb to \$0.66/lb. The monthly average prices in 2012 closely followed those in 2011 through July, but declined somewhat during the last three months of the season as age-1 shrimp became a larger component of the catch and age-3 percentage declined (Figure 14). Overall, shrimp sales brought in \$24,685,293 to Oregon coastal economies!



**Figure 13. Annual average ex-vessel price per pound paid for pink shrimp landed in Oregon; 1968-2012. Prices not adjusted for inflation.**



**Figure 14. Monthly average ex-vessel price-per-pound paid for pink shrimp landed in Oregon: 2007 through 2012.**

Oregon shrimpers also earned a raise of sorts beginning on 19 May 2012 by paying off the loan balance for the 2003 shrimp permit/vessel buyback. Oregon shrimpers had been paying 4.75% of the value of their catch to service the loan balance remaining from the purchase of 40 vessels with Oregon shrimp permits.

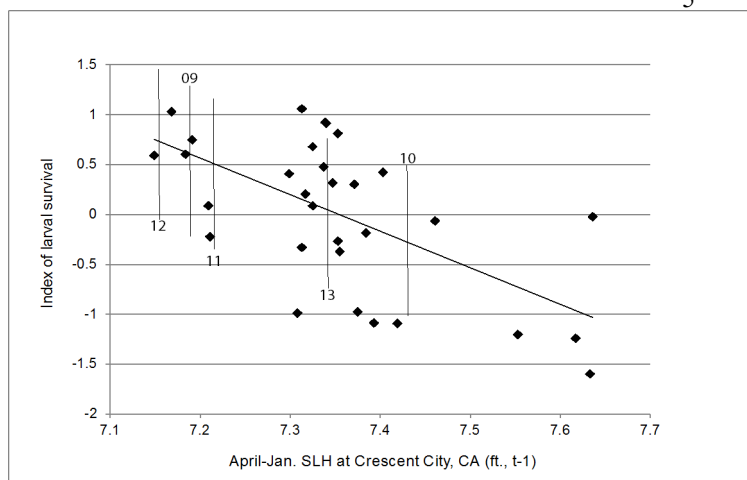
### Indicators for 2013

After experiencing two seasons with catches approaching 50 million pounds, it's mighty tempting to hope for another one. Given the catch history (ups & downs) of the Oregon fishery and rapidly changing annual recruitment levels over the years, it seems unlikely but possible. We've had some unprecedented recruitment events of age-1 shrimp in southern areas during the last few years and hold-over to age-2 has been exceptional. The low abundance of adult hake on the shrimp grounds may have resulted in significantly decreased predation, which may have boosted both shrimp and eulachon survival. We're in unprecedented territory in many ways, which makes interpreting common indicators unusually dicey.

Hold-over of 2012 age-1 shrimp will play a crucial role in shrimp harvest during 2013, as it did in 2012. In order for 2011-2012 harvest levels to be maintained, hold-over to age-2 shrimp in 2013 will need to be high. Based on the age composition of the 2012 catch (Figure 11), the strength of the age-1 component was smaller than any year since 2006. However, the relatively small size of age-1 shrimp in 2012 probably dampened harvest and their representation in the catch. It is possible that shrimpers may simply have been able to avoid areas with large concentrations of age-1 shrimp due to easy availability of extensive populations of older shrimp, thus masking their true relative strength.

Our recruitment model suggests that age-1 recruitment in 2013 will be average to below average (Figure 15). The larval index is sharply lower than what was predicted for the past two years. If correct, there may be fewer age-1 shrimp on the grounds in 2013 than in 2012 or 2011. It should be noted though that these predictive values have a wide range and are a fairly loose indicator, at best.

The percentages of age-0 shrimp seen in 2012 market samples also suggest a modest recruitment of age-1 shrimp in 2013. The levels were very similar to those seen in 2011 samples, with age-0's making up a maximum of 1.0% in the samples. Keep in mind that we're still not sure how strong the age-1



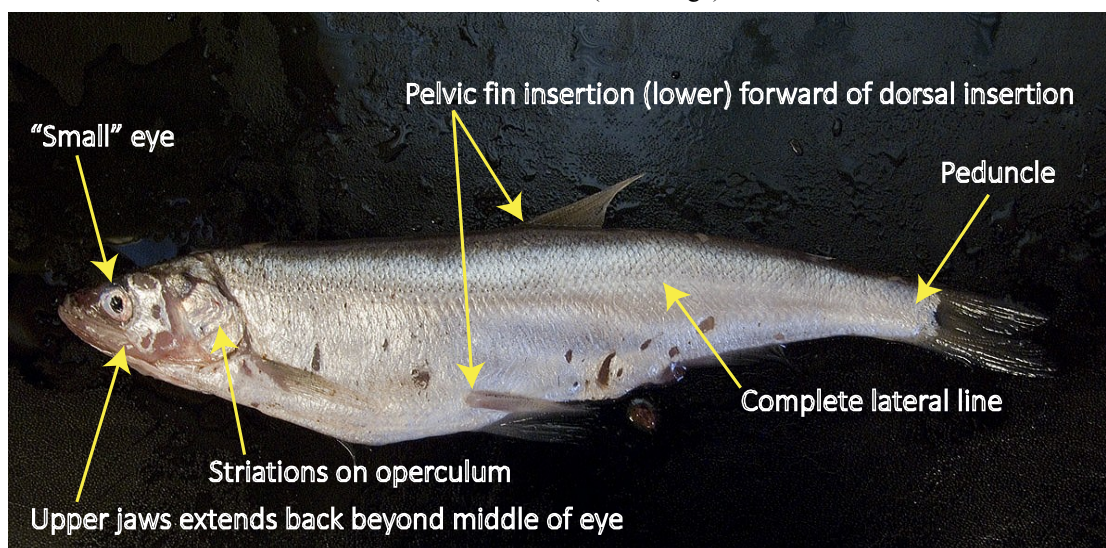
**Figure 15. Index of larval survival vs. April-January average sea level at Crescent City, CA. Points shown indicate year at age-1 catch. The vertical lines indicate the range of larval survival that might be expected given the sea level height for the years identified.**

class of shrimp really was in 2012. Shrimpers did report seeing low numbers of age-0 shrimp in 2012, although some said they caught more of them at times. The general feeling seemed to be that age-0's were present, but not abundant.

The bottom line is that these indicators, considered together, seem to support the notion that shrimp production may decline in 2013. By how much; we'll just have to see. It depends on the true strength of the age-1 populations both in 2012 and 2013, and that is hard to determine right now.

### ESA/Eulachon Update

Ocean environmental conditions have apparently been conducive for eulachon larval/juvenile survival for the last two years. Shrimpers reported seeing more eulachon in their catches during 2012 than they'd seen for many years (see photo Figure 16). They reported that the eulachon were widespread and abundant on the shrimp grounds from northern California to beds off Washington. Reported catches were dominated heavily by a single size-class; probably age-1+ fish (4-6" range).



**Figure 16. Eulachon can be identified (even in rough shape, like this one) by using a combination of several characteristics; 1) the distinct lateral line extends from behind head to the tail, 2) they typically have fine concentric striations on the gill cover (operculum), 3) the upper jaw extends back beyond the middle of the eye; 4) the leading edge (insertion) of the pelvic fins are forward of the dorsal fin leading edge; and 5) the eye diameter is less than the height of the base of the tail (caudal peduncle).**

Some shrimpers expressed concern over how the increased bycatch of eulachon that they encountered will be perceived by NOAA's Office of Protected Resources (PRD). The fleet has made important efforts to reduce their eulachon take (i.e. ¾" grates became required in 2012) and don't want the level of eulachon bycatch this year to be misinterpreted. By using rigid-grates, shrimpers have sharply reduced the proportion of the eulachon population impacted on the shrimp grounds. Further reductions may be possible through other shrimp gear modifications. Right now, we don't know how the PRD will proceed in light of the apparent ocean population increase. The last news that we've heard is that they were developing conservation regulations under section 4(d) of the Endangered Species Act (ESA) for Pacific eulachon and considering efforts to develop a recovery plan. ODFW staff are ready to contribute constructively to the process and will continue to research methods to further reduce eulachon take in the shrimp fishery.

The eulachon issue is still with us and likely will be for some time. Please keep in mind that eulachon are officially listed as threatened under the ESA. A good eulachon recruitment event is good news, but it won't immediately reverse the ESA listing by itself. We'll do our best to keep the industry informed as the ESA process goes forward. In the meantime, shrimpers need to continue their efforts to help further reduce their eulachon take.

### MSC Update

#### MSC Recertification Status

The Oregon Trawl Commission (OTC), led by director Brad Pettinger, has applied for, and received, MSC recertification as a conditionally certified sustainable fishery. The MSC has identified a list of conditions that must be met on a set schedule within five years in order to maintain certification. Some of these conditions can be accomplished by the OTC, while others can be handled in-house by ODFW staff. At least one condition though, will require the approval of the Oregon Fish and Wildlife Commission (OFWC) in order to be implemented. Meeting this condition requires a formal change in the way we manage the pink shrimp fishery here in Oregon through adoption of a "Target and Limit" (T&L) shrimp management system. It's an important change and may be controversial to some industry participants, but is required if the industry is going to keep its MSC certification. To this end, we've constructed a draft proposal for a T&L system that we believe will work well for Oregon. Highlights of the draft proposal are discussed in the following paragraphs.

#### Background

Our practical alternatives for constructing a T&L system are very limited. Oregon shrimp fishery catches are strongly dependent on annual recruitment success, which is environmentally driven and does not have a strong relationship with how much shrimp escaped the fishery during the parent year. The stock has periodic recruitment failures, most notably during strong El Nino events, but has repeatedly shown the ability to bounce back within a single year, when the ocean environment improves. Since we don't have a pre-season shrimp survey, our only option is to fish part of the season each year in order to generate solid information on catch rates and to determine what the condition of the stock is. Then, if necessary (which should be rarely), conservation actions could be taken.

#### How would this draft T&L system be different?

A T&L shrimp management system establishes specific guidelines to curtail portions of the shrimp season if certain conditions indicate that the shrimp population is at an extremely low level. This type of system is used in most of the world's fisheries and simply requires a "target"; a level we'd like to keep the stock above, and a "limit"; a level where we take more serious steps to protect the stock. Historically, the Oregon shrimp fishery has been liberally managed by establishing a 7-month season, a maximum count-per-pound regulation and a limited entry system. Under the current system, shrimpers could continue to fish despite evidence for extremely low stock levels, unless ODFW took emergency action.

#### What's the "Target" in this draft T&L proposal?

It's just a minimum stock size that we don't want to fall below. Concern about a low shrimp spawning stock would be triggered if the average catch/trip for landings into Oregon during the month of June falls below 12,500 pounds (Figure 17). Under this scenario, the season would end on 15 October. The following season would not start until 15 April. Such early closures would have occurred three times since 1982; in 1982, 1984 and 1995. A closure would provide increased protection for a small spawning stock of egg-bearing females, and increase the chance of a quick rebound.

#### What's the "Limit" in this draft T&L proposal?

It's a threshold stock size where we stop shrimping to prevent the stock from going below the lowest levels of spawning stock biomass that we have ever seen (Figure 18). It has only happened twice since 1982; during the 1983 and 1998 El Nino events. If we experience a year with very high sea levels (i.e. El Nino) AND June catch/trip drops below 10,000 pounds (Figure 17), the season would end during mid-July and would remain closed until 15 April of the following year. We believe that most shrimpers would probably stop fishing voluntarily at these low stock levels anyway due to poor economics, but the new system would protect a very low population from harvest if shrimp price also increased substantially.

#### How would the change impact the fishery?

The new system should not affect the fishery during most years. Had the system been in place historically, action would have been taken only five times since 1982 (three October 15 closures and two July 15 closures).

#### What happens if the T&L proposal isn't adopted?

The Oregon pink shrimp fishery would lose MSC certification if the proposed T&L system (or something very similar) is not adopted. Under that scenario, the fishery would continue under the current management scheme, but would lose any benefits of being certified as sustainable by the MSC.

#### Where can I find the full draft proposal?

We have produced a draft document that details the basis for the proposed target and limit management system for shrimp, given their unique life history and population dynamics. The draft document is entitled "The population dynamics of Oregon pink shrimp (*Pandalus jordani*) and recommendations for management using target and limit reference points or suitable proxies". We'll be happy to mail you a copy if you want to review the full draft document. Just give us a call at 541 867-4741.

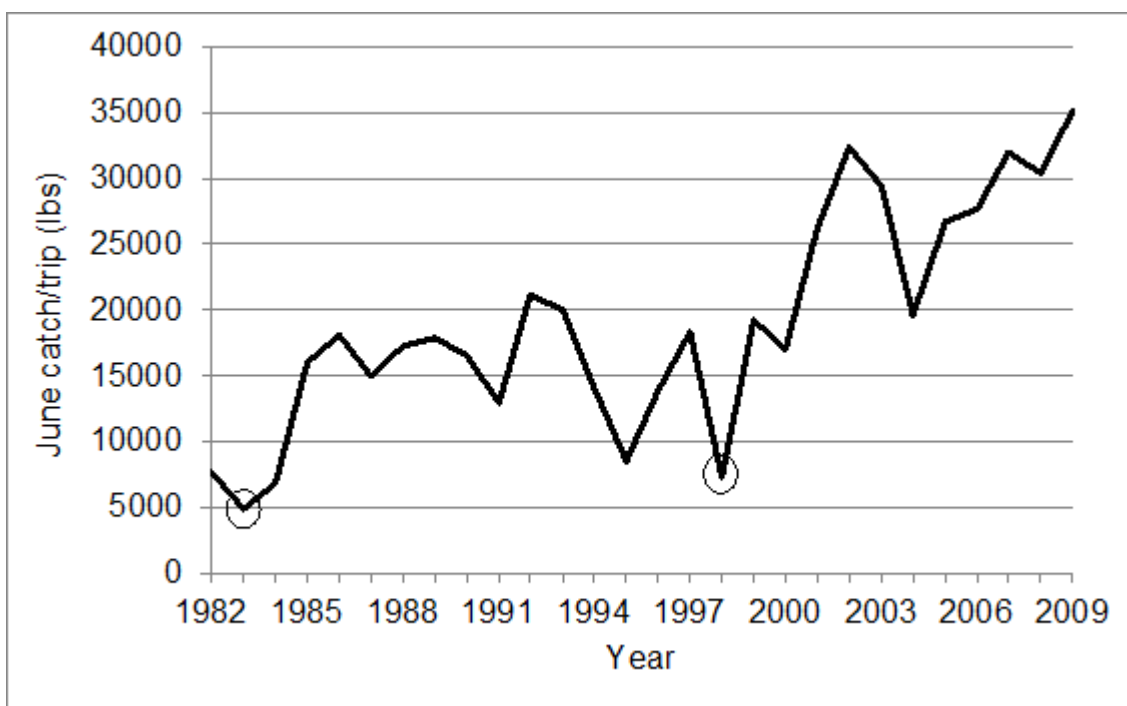


Figure 17. The average June catch-per-trip of pink shrimp landed into Oregon ports; 1982-2009. Shrimp season would have closed during mid-July during 1983 and 1998 (circled) because sea levels were very high AND June catch-per-trip fell below 10,000 pounds/trip.

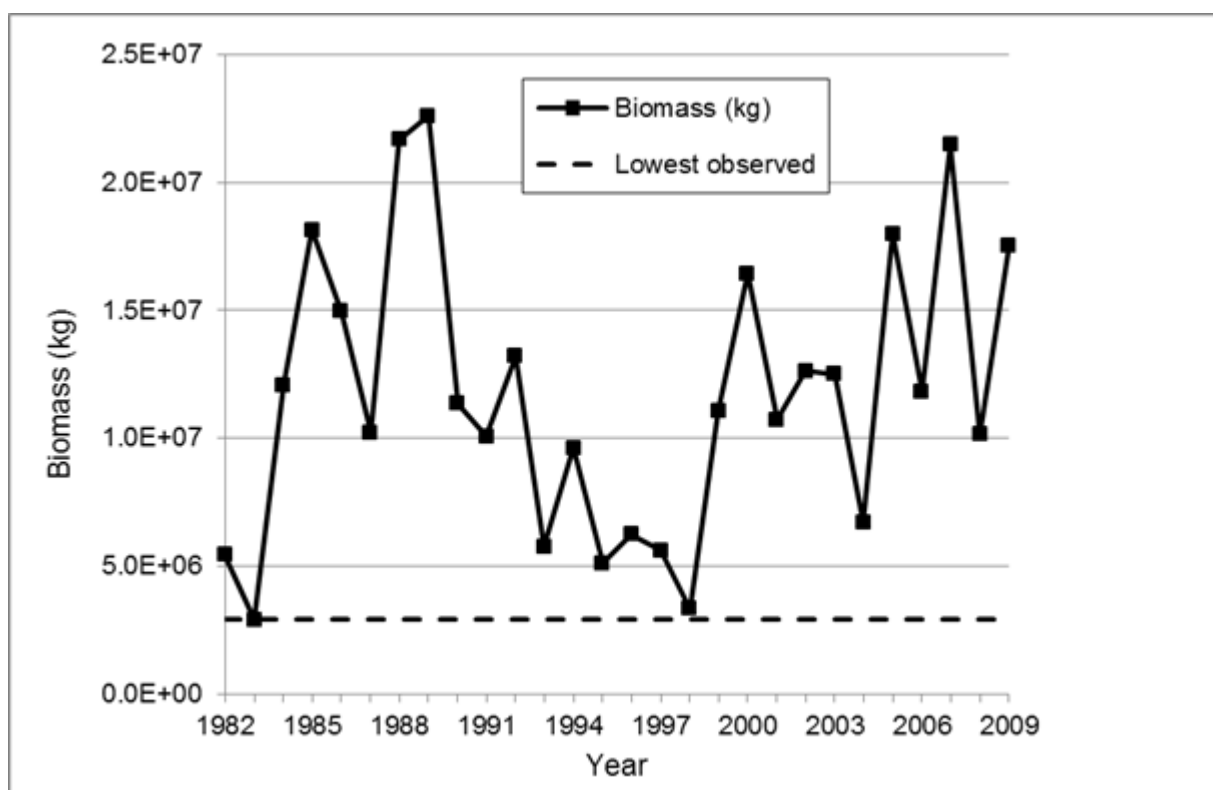


Figure 18. Model estimates of pink shrimp spawning biomass, 1982-2009 compared to the lowest observed spawning biomass (1983, heavy dashed line).

### Other Considerations

In thinking about this proposed change in management, it's important for fishermen to consider a few other things. When conditions in the fishery decline to levels like what was seen in 1983 and 1998, late-season effort typically drops off sharply anyway, because fishing is not very profitable. Also, if conditions were to develop where these very low catch levels did coincide with continued high effort levels, ODFW's shrimp staff would be very concerned about a new low in shrimp spawning stock levels and might recommend season reductions on an emergency basis even without a "limit reference point". Also, note that any closure by Oregon would prevent fishing in waters off Oregon and landings into Oregon ports, but would not stop fishing in waters off California and Washington that results in a landing into those two states (unless they also take action).

It's also worth noting that Oregon shrimp staff are comfortable with Oregon's current approach to managing the fishery based on a simple 7-month season, count-per-pound rule and monitoring program based on samples and logbooks. Every time we have evaluated the fishery over the last 20+ years we have found little evidence of overfishing and strong evidence of the stocks ability to rebound very quickly from year class failures. This is perhaps an "old fashioned" management system, wherein staff are relied upon to identify if overfishing is happening and are counted on to take appropriate action at that time. However, the MSC wants a more modern and "failsafe" system, and we believe that can only be a good thing for the fishery over the long-term. The decision we will be approaching on T&L management is really a question of how much the shrimp industry wants to change in order to maintain MSC certification.

### Upcoming Fleet Survey

We'd like to measure the degree of support that industry participants have for adopting this T&L management system proposal. **Does industry support maintaining MSC certification, given what is required?** Please take time to consider what MSC certification means to you and your segment of the industry, and familiarize yourself with the new proposal. In mid-March, we'll be distributing a brief questionnaire to as many industry participants as possible, asking whether you support the change or not and asking for comments.

The questionnaire will be mailed to all pink shrimp permit holders and hand-delivered by shrimp staff to skippers, crew and processors. You'll be asked to identify yourself (so we can avoid duplicates), identify the segment of the industry you participate in, indicate whether you support the T&L proposal or not, and to return the questionnaire to us quickly by mail or directly to staff. We will summarize the survey responses, as a whole and by industry segment, and will get the results back out to industry.

### OTC Informational Meetings

Brad Pettinger (OTC director) held a series of port meetings along the coast during October 2012 to discuss MSC recertification and to explain the T&L management system condition to interested industry members. Participation was sparse but Brad said that those attending were generally supportive of maintaining MSC certification and adopting the new approach.

## 2012 Research Results

### Modified Groundline Experiment

Continuing our on-going efforts to reduce eulachon bycatch, we chartered the double-rig shrimper F.V. Miss Yvonne during June 2012 to test the use of a net with a modified groundline; one with a five foot center-section removed (Figure 19). We call this setup a "footrope window". We tested the modified net against the vessel's normal net with a complete groundline (Figure 20). We completed 32 tows over the 4 day experiment, switching the groundline modification from side-to-side at the end of day-1 and day-3. Fishing line height was similar for both nets. The intent of this simple groundline modification was to provide an unobstructed escape route for eulachon underneath the fishing line.

Our results were inconclusive, but intriguing. Significant eulachon reduction was achieved along with very modest shrimp loss until the completion of one tow on day-4. The tow, which we suspect may have had a fouled footrope, rendered the overall eulachon reduction for the experiment non-significant. Due to the flawed results, we plan to continue the experiment in 2013, since we strongly suspect that there is a real beneficial effect to be had by providing a footrope window.

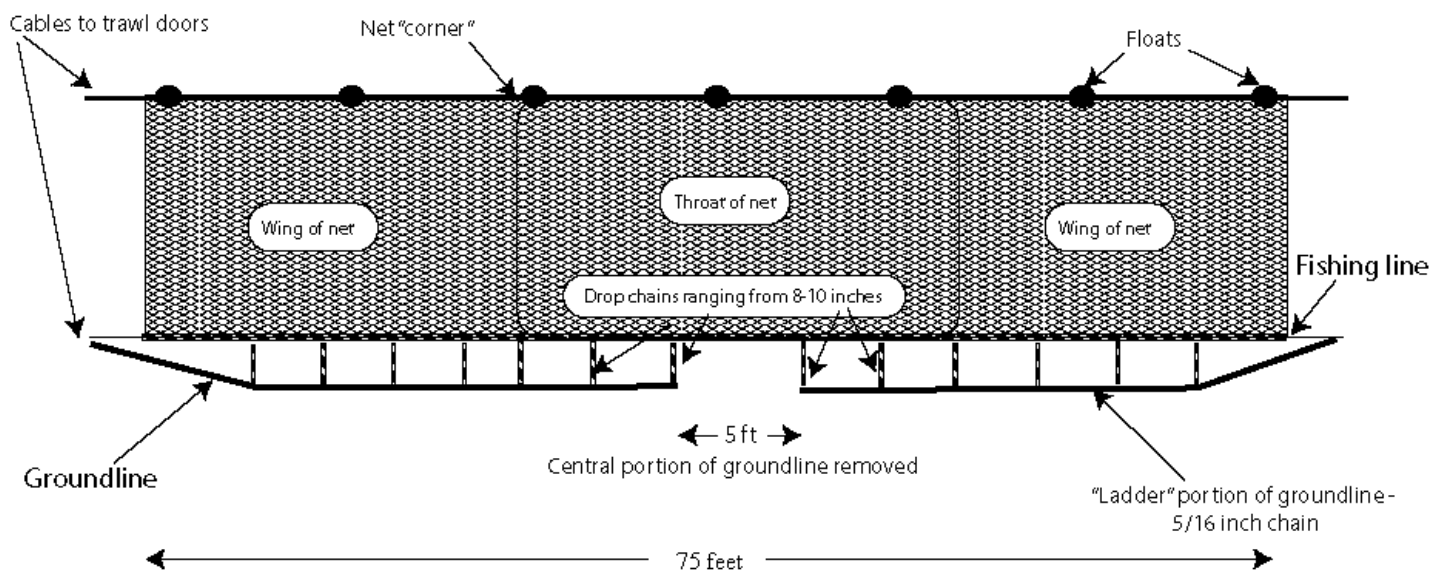
### Fishermen Contributions

Jeff Boardman, skipper and owner of the F.V. Miss Yvonne, went the extra mile this year to test a potential eulachon bycatch reduction technique. Staff was on the fence wondering whether to spend time and research dollars testing a typical grate mounted upside down. Some reports from shrimpers, including one who had mistakenly mounted a grate upside down, suggested that it didn't affect shrimp catch and improved fish exclusion for some species. Well, Jeff decided just to try it and report back to us before we did a full-blown study. He tried it for two days and found that the inverted grate caught about the same amount of shrimp, but noticeably *more* eulachon. Jeff's effort saved ODFW the cost of a four day charter trip to test the arrangement, allowing funds to be better spent on testing other promising gear modifications. It's a fine example of shrimper-biologist collaborative research.

## 2013 Research Priorities

We've changed the format of this section presenting our research plans for the upcoming year. The change addresses a new MSC requirement that the shrimp project formalize its approach to planning for the fishery-related research that we do. It wasn't that reviewers didn't like the research we've done over the years; they just wanted the process to be more formal and include some justification for how we prioritize what we focus on. The MSC stipulated that we address three areas: shrimp population dynamics, non-target catch and ecosystem effects each year. In interpreting the 2013 plan presented below, it should be noted that regardless of what priority is assigned to any particular research plan component, the completion of work in any given year will always depend on staff and equipment availability and the amount and type of funding available. The availability of research funding can be highly variable from year to year.





**Figure 19. Schematic of a pink shrimp trawl net with a narrow center section of the groundline removed (viewed from front, not to scale. We tested this style against a trawl net with a complete groundline.**



**Figure 20. Photo showing one of the nets we tested during our “footrope window” experiment with a complete groundline. The dark arrows designate the groundline section that was removed on the other net**

#### Shrimp Population Dynamics (Priority 1)

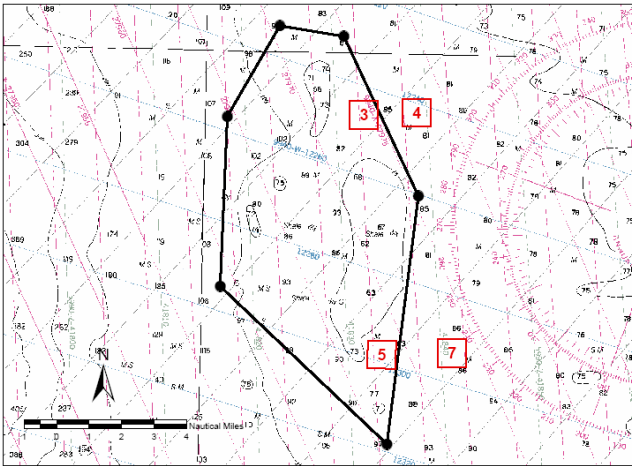
Our ongoing efforts to sample the fishery, analyze sample and logbook data and periodically evaluate our environmental models, trends in the fishery and any new evidence relating to fishery-driven stock declines is our top priority. This work is our top priority because it is the basis for managing the fishery the way we do, using primarily just a 7-month season, limited entry system and a maximum count-per-pound regulation. In 2012, this component of our research plan resulted in the re-analysis of the available shrimp population data and the development of a proposed method to implement T&L management for this fishery (see MSC pg. 6). This plan component is scheduled to be completed every two years, which will require that our re-evaluation of our shrimp population models be conducted in 2014 and summarized in the winter/spring newsletter in early 2015.

#### Non-target catch (Priority 2)

Although the shrimp fishery has made great strides in reducing bycatch with BRDS and is probably the lowest bycatch shrimp trawl fishery in the world, working on further reducing bycatch is still a high priority because of the “threatened” status of eulachon. We understand the substantial challenges of rebuilding eulachon and recognize that the factors driving their population status are primarily external to the shrimp fishery. However, we still need to do what we can to help lower bycatch and improve survival of eulachon that interact with shrimp trawl nets. Our work to date with footropes suggests there may be some ways to further reduce bycatch and maintain shrimp catch rates. In 2012, our single test of a “footrope window” was suggestive of a positive effect, but not conclusive due to variation between hauls. To further this work in 2013, we propose to conduct a second very similar “footrope window” experiment, using somewhat lighter groundline material which we hope will provide more conclusive results. The use of lighter groundline material makes this project fit in as well under “ecosystem effects” below.

### Ecosystem Effects (Priority 3)

Research on ecosystem effects is our lowest research priority simply because our research program is small and the issue of ecosystem effects of west coast fisheries is large and complex (large spatial scales, effects from multiple fisheries, a generally poor understanding of many species that are not the focus of major fisheries, etc.). Quite simply, ODFW shrimp staff can occasionally conduct studies of limited scope that help some with specific ecosystem issues related to the shrimp fishery, but the larger problems are simply too spatially extensive to attack with our limited research budget and staff. With that in mind, if funding allows and the ODFW ROV is available, we would like to return to Nehalem Bank in 2013 and re-survey the 4 areas we evaluated in 2007 for benthic trawl effects to see how these areas have changed after 8 years of no trawling in two of these areas (Figure 21).



**Figure 21. A chart of the Nehalem Bank/Shalepile area showing the EFH no-trawl zone boundaries established in June 2006. The squares labeled #'s 3, 4, 5 and 7 are the areas surveyed during the June 2007 charter on the F.V. Miss Yvonne and which we hope to resurvey in 2013.**

### Observer News

We heard rumors from shrimpers during the 2012 season that NMFS observer coverage would be reduced or curtailed during 2013. We contacted the NMFS observer coordinator and he confirmed that shrimp-trip observer coverage would be reduced, but not eliminated, during 2013. All of the fisheries that were observed during 2012 will be observed during 2013, but with roughly half the number of observers.

### Enforcement issues

Count-per-pound (Count) issues were not a problem in 2012. The Oregon State Police (OSP) checked into at least one report of small shrimp in Charleston early in the season, but the load was determined to be legal.

No rigid-grate bar spacing violations were reported by Oregon State Police (OSP) during the 2012 season. Bar-spacing compliance of the rigid-grates checked was 100%. If you've got questions regarding the legality of your grate(s), please contact OSP for an evaluation.

One south coast vessel skipper persistently declined to provide a copy of his logbook pages to a local port biologist. After many attempts, the matter was referred to OSP for resolution.

### Regulation Info.

#### Groundfish Limits

The NMFS proposed 2013 groundfish limits for shrimpers are listed below.

- The groundfish TRIP LIMIT for shrimpers is 1500 lb/trip, not to exceed 500 lb/day.
- The weight of groundfish landed may not exceed the weight of shrimp landed.
- Canary Rockfish, Thornyheads or Yelloweye Rockfish are prohibited.
- Lingcod, 300 lb/month with a 24" minimum size limit.
- Sablefish; 2000 lb/month.
- All other groundfish; Landings of these species count toward the per-day and per-trip groundfish limits and do not have species-specific limits.
- Limited entry groundfish vessels possessing pink shrimp permits and harvesting pink shrimp must stay within the daily/monthly limits established for the shrimp fishery. They must also include any fish catch taken while shrimping toward their species limits for the limited entry groundfish fishery.

#### Essential Fish Habitat Trawl Closures

The Pacific Fisheries Management Council (PFMC) has designated several Essential Fish Habitat (EFH) areas off the Oregon coast as no-trawl zones. The areas are set aside to protect hard-bottom habitats and associated species. Shrimpers are cautioned NOT to trawl within these areas. The NMFS will enforce the EFH no-trawl areas via the Vessel Monitoring System. The area-closure that may affect Oregon shrimpers most is the Nehalem Bank/Shalepile EFH. Other EFH no-trawl areas near commonly shrimped grounds are Daisy Bank, Stonewall Bank, Heceta Bank and Coquille Bank. The coordinates delineating the Nehalem Bank and other EFH areas are listed on the PFMC web page at "<http://www.pcouncil.org/groundfish/fishery-management-plan/fmp-appendices/>", under Appendix C #3: Coordinates for EFH Conservation Areas.

#### CA/OR Shrimp Trawl Mesh Regulations

Many Oregon shrimpers traveled below the California/Oregon border to harvest shrimp in 2012. We heard no reports of shrimping violations during 2012, but we want to remind Oregon shrimpers again of the need to be thoroughly aware of shrimp trawl regulations in both California and Oregon before they shrimp below the border.

California regulations require all California permitted pink shrimp trawlers fishing below the Oregon border to use trawls with a mesh size no smaller than 1-3/8" between the knots when shrimp trawling from 3-200 miles offshore. No trawling is allowed within California state waters (0-3 miles). Also, these vessels may not have any mesh smaller than 1-3/8" between the knots anywhere on-board (including extra codends). Oregon permitted pink shrimp trawlers fishing below the Oregon border that don't have a California permit must also use nets (including codends) with mesh no smaller than 1-3/8" between knots. If there is any other mesh in their

nets or on-board (i.e. stored codends), such a vessel may not legally transit within California state waters (0-3 miles) at any time during the trip. Details on pertinent regulations can be found on the California Department of Fish and Wildlife website at: <http://www.dfg.ca.gov/>. Just search on “Commercial Fishing Digest”.

Oregon regulations require that shrimp harvested below the California/Oregon border and landed into Oregon be caught with California-legal nets. The regulation reads; “It is unlawful to land shrimp taken south of the Oregon-California border with nets having a mesh size of less than 1-3/8 inches between the knots”.

#### VMS and Declarations required

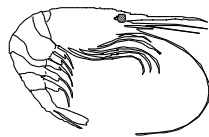
The National Marine Fisheries Service (NMFS) permanently requires shrimp vessels to have an approved and operating Vessel Monitoring System (VMS) on-board. For VMS-related information, please consult the NMFS “Compliance Guide for the Pacific Coast Groundfish Fishery Vessel Monitoring Program” at the following website: <http://www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/Vessel-Monitoring-System/Index.cfm>, or call NMFS OLE at 206-526-6133.

Additionally, NMFS requires shrimpers to file a declaration report before the vessel is used to fish in any Rockfish Conservation Area (RCA). Shrimpers need to declare before leaving for their first shrimp trip of the season. Only one declaration is required for the season, providing that the vessel doesn’t engage in another fishery during the season. For details about declaration procedures, please visit the NOAA Fisheries Office for Law Enforcement website ([http://www.nmfs.noaa.gov/ole/nw\\_declarationreqs.html](http://www.nmfs.noaa.gov/ole/nw_declarationreqs.html)). Declarations may be made via phone by calling 1-888-585-5518

#### **Acknowledgements**

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Good Luck Shrimping in 2013!



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