Fishery Management / Industry Organization

United States Department of Agriculture
Trade Adjustment Assistance Program
Southeast Alaska Shrimp

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Management & Organization
what we’ll look at …

Fishery management / biological management & licensing

Practices elsewhere & comparison with Alaska situation.

Industry organization & interacting more successfully with regulators.

“Decisions taken before fishermen even wet their gear can determine their success. Knowing the options available for fisheries management can lead to better economic outcomes.”
Licensing, management & fishery economics

Permit structure & management measures establish the “playing field” in which fishermen must compete economically.

“Best practices” in both areas are critical to your individual success.
SE Alaska Shrimp Fishery Permitting

It is a major plus that both beam trawl (P17A) & pot shrimp (P91A) are limited entry fisheries

Pot fishery: Nov., 1995 / max. 332 permits
Beam trawl: Jan, 1997 / max. 32 permits

But big permitting challenges remain...
Pot Shrimp Permitting

High value product, but too many permits chasing too few shrimp

2009 Numbers:

278 permits renewed - 249 resident & 29 nonresident
(175 transferable permits / 104 non-transferables)

It is a telling measure of industry viability that only 108 permits were actually fished
(102 resident & 6 nonresident)
Pot Shrimp Permitting

Permit values reflect fishery value:

- SE Pot Shrimp: $13,000 - $15,000
- British Columbia: $500,000+
- Washington: $150,000+
- California: $250,000 (est)

Large number of non-transferable permits make Alaska fishery very hard to rationalize

Latent permits defeat efforts to improve economics
Why the difference?

Other fisheries have advantages

- All have better market access
- All have equal or much better ratio of fishermen to resources
- None have latent permit problems
- One has strong in-season management

Market access is a geographical advantage... others are functions of management & permitting
AK pot shrimp management

ADF&G sets pre-season target GHL’s for each district or sub-district

Some pre-season testing is done, but prior season results are primary

Flexible, but system limitations enforce a very conservative approach to in-season management
AK pot shrimp management

ADF&G hampered by generally limited financial resources...and lack of dedicated funding for the shrimp fishery...

Impossible to have intensive in-season management under existing constraints

Limits resource availability & hurts your bottom line!
B.C.’s Spawner Index System

A very different approach is used in British Columbia...

Spawner index: a biological reference point / measures number of females remaining for spawning / when reached area is closed

Intensive catch sampling - 11 chartered vessels take up to 1,500 catch samples each season

Evidence indicates this system optimizes catches
BC System Pros & Cons

But, it is expensive.

Fishermen pay management fees of up to $600,000 – about $2,400 each - per year

But, proponents say it supports higher catches and more than pays for itself

Very importantly, it buys fishermen a place at the management table.
BC System...

B.C. management successfully targets prawns in the last year of life...at maximum size and value

Undersized prawns (<33 mm / 1.3” carapace length) cannot be retained

...in Alaska?

Spawner index would virtually assure sustainably higher SE Alaska prawn catches & overall value... But would it “pencil out”? 
What about permit numbers?

Increasing fishery value without addressing permits numbers will just bring latent permits back into the fishery.

Biggest challenge is non-transferable...no market based solution without ability to trade permits.

Making transferable permits equal to gear units could be basis for “permit stacking”.

With spawner index, IFQ’s not needed or desirable.
Beam Trawl Permitting

Better permit situation than pot shrimp...

Just 29 permits (25 resident 4 nonresident) (23 transferable permits / 6 non-transferable)

But fishery economics are so bad that only 4 (all residents) actually fished

At this point the fishery faces commercial extinction...
Beam Trawl Permitting

Direct comparison of permit prices with other West Coast trawl fisheries not possible

But, permits are selling for far less than expected when fishery was limited...$50K initially asked...$15K could get one now

Low number of permits makes possibility of profitable rationalization reasonable
AK beam trawl management

ADF&G uses GHR’s & GHL’s instead of hard Total Allowable Catches (TAC’s).

GHR’s are established for each stat area, and can reflect a range from 0 on up. GHL = target harvest level within the GHR

Total SE GHR = 550,000 - 3.225 million lbs
Actual 2009 catch= 53,518 lbs
Strong resource, but failed economics...

SE Alaska trawl shrimp resource is robust, & outside Petersburg / Wrangell area has scarcely been touched in decades

But lack of a processor demonstrates failure of traditional economic model

What are the options?
Other development models

Unlike pot fishery, other West Coast shrimp trawl fisheries don’t offer good beam trawl management alternatives

*P. jordani* in WA/OR/CA short-lived, single species fishery, and...

It’s a low value model in any case
Management alternatives...

In-shore fisheries elsewhere also focus on lowest-value “peeling only” production

Best model: North Atlantic factory trawlers

Enterprise allocations, ie. vessel quotas
- focus attention on value not tonnage
- promote rational investment, but
Still produces product for onshore peelers
Could we do that here?

Yes! The 3 basic product forms...can be done on SE-sized catcher processors

Alaska precedent for equal allocation quotas (Clarence & Chatham Str. black cod)

Freezer boats could expand fishing area...

Not everyone would have to convert
Can fishery support 29 permits?

15 year avg. landings = 2,128,741 lbs

73,405 lbs / permit (33.3 mt)

Delivered for peeling @ $.45/lb = $33,032
Factory trawler value $2,800/mt = $93,255

In either case, not enough to support a professional fishery
What needs to be done?

At top of GHR = 3.2 million lbs

110,345 lbs / permit (50.1 mt)

Delivered for peeling @ $.45/lb = $49,655
Factory trawler value $2,800/mt = $140,184

Approaching viability / Quota system with permit stacking would get you there
What needs to be done?

Equal allocations, with permit stacking could create a viable, professional fishery.

What’s better? 29 separate operations...none of which are truly economic...

Or 15 thriving fishery businesses.
Outlook for beam trawling ...
No where to go but up!!

Strong resource with good species mix

Limited entry a big plus

World coldwater shrimp market on the rebound

Interest to re-open a peeling plant in Petersburg

But, economic options not limited to traditional methods...catcher processor option looks positive
Let’s look at industry organization...

Do you have a voice?
Organization

Look at any successful fishery...you’ll likely find an effective industry organization

PVOA, Alaska Trollers Association...B.C.’s Pacific Prawn Fishermen’s Association

No dedicated organization for spot prawn or beam trawl shrimp fisheries

And it shows in results...
What organizing gets you...

- Recognition at political & managerial levels
- A strong, coordinated voice
- Professional analysis
- Ultimately, better economic results & more value for your efforts & assets

Organizations don’t have to be adversarial.

They can be a big asset to ADF&G by advocating for the financial resources they need to better manage your fishery.
SARDFA is a great example

The SE dive fisheries were going nowhere

Organizing turned that around...Dive fishermen took charge of their future

Self-assessment bought them a place at the management table...totally changing the equation

There are many areas for improvement in the shrimp fisheries that individuals can’t take on, but which an organization could
More than just management politics...

Industry organizations can help with marketing...

environmental concerns...

work on issues like local fisheries infrastructure & technical innovation