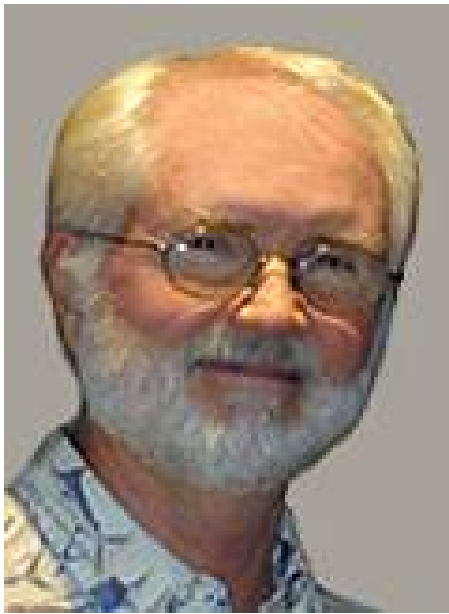




Best Aquaculture Practices Training In Malaysia

Jeff Peterson

**BAP Certification Management
Director of Quality Control**



Jeff Peterson

BAP Certification Management, United States

- **Jeff Peterson is director of quality assurance for BAP Certification Management, responsible for Best Aquaculture Practices training programs and informational seminars.**
- **In 2002, he became an auditor for the Aquaculture Certification Council and inspected shrimp facilities in Asia, Central America, the US and elsewhere. He has also received certificates for HACCP, ISO 22000, SA 8000, GlobalGAP Train-The-Trainer and other auditing.**
- **Peterson received a bachelor's degree in biology from Villanova University in the U.S., but soon moved overseas to pursue aquaculture opportunities. From 1982 to 1994, he managed Acuespecies S.A. de C.V. in Ecuador and later started a shrimp farm in the U.S**

Best Aquaculture Practices and Certification Drivers

“Retailers, not consumers, are the driving force behind corporate social responsibility and farmed seafood certification.”

... said Peter Redmond, the GAA’s VP of Development, Administration and Communications.

Redmond was addressing attendees at the World Aquaculture Society’s Aquaculture 2010 conference in San Diego.



BAP Certification Drivers: Corporate Partners



Giant®



BAP Certification Drivers: Governments

- **A second driver is a government interested in improving the growth and sustainability of their aquaculture industries through the promotion of best aquaculture practices.**
- **Malaysia, through its Department of Fisheries (DOF) and Ministry of Health (MOH), has taken this proactive, industry-enabling approach.**



Aquaculture Certification In Malaysia: Existing Framework

- **Department of Fisheries Quality Certification Program (FQC)**
- **Ministry of Health Seafood Processing Plant HACCP Certification Program**
- **Ministry of Environment Farm and Plant Effluent Monitoring Program**

Only facilities registered under these programs are authorized to export seafood. The DOF and MOH programs, following EU guidelines, and subject to EU verification, address many of the food safety standards of benchmarked certification programs.



Aquaculture Certification in Malaysia: Building on Existing Framework

By continuing to strengthen their national aquaculture registration and surveillance programs, Malaysia will be well positioned for success with third party certification programs.

In a larger context, improving aquaculture sustainability not only satisfies the needs of the importers and buyers, but has intrinsic environmental and social benefits for the producing country.



BAP Training in Malaysia: A Two-Phase Approach

- **Phase One: Facilities Assessment Survey**

To better understand the status of the Malaysian aquaculture industry, a team of two BAP auditors conducted a country-wide survey of hatcheries, farms and processing plants.

A total of 17 facilities were surveyed:

3 hatcheries

9 farms

5 processing plants



BAP Training in Malaysia: Methodology

- **The facilities visited included both small-scale and larger, corporate, integrated operations.**
- **Larger operations include the major exporters to the US, Japan and EU countries.**
- **The smaller producers tend to focus on local or regional markets.**
- **Since the team was interested in the conformity of the facilities visited, the BAP audit checklists were used to capture relevant data and later used for comparative analysis.**



Malaysia Facilities Survey: Document Review



Malaysia Facilities Survey: Farm Visits



BAP Training in Malaysia: A Two-Phase Approach

- Phase Two: Training Programs

Based on the results of the facilities survey a detailed Training Program was developed consisting of two major components.

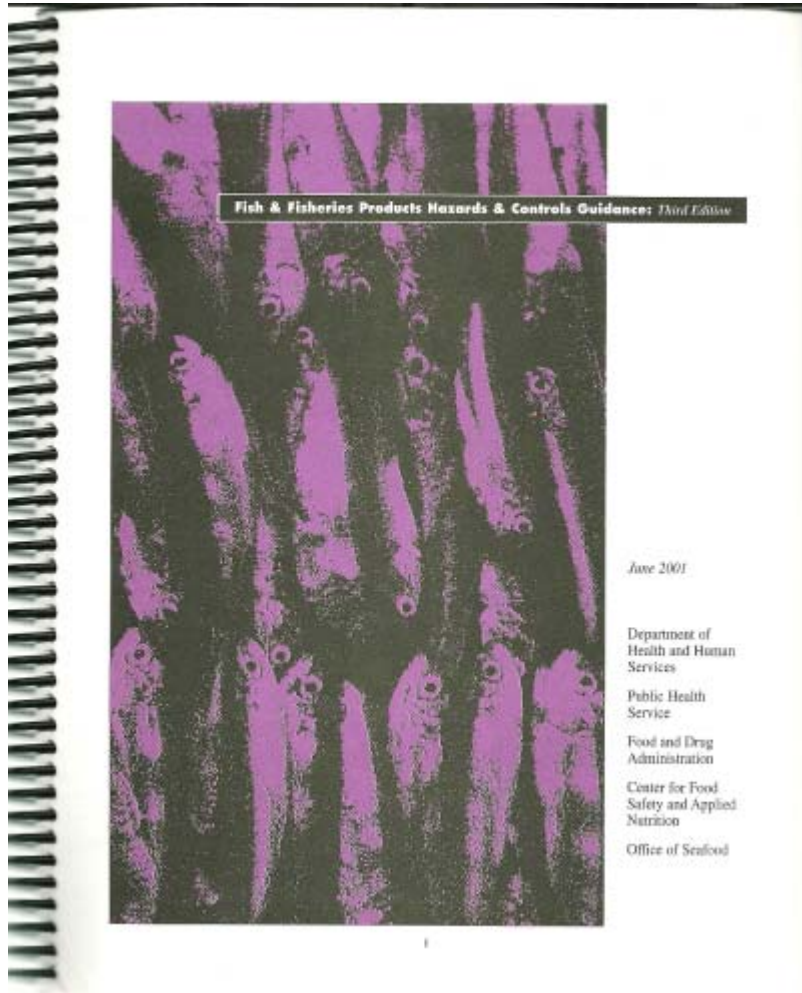
- BAP Workshops: A series of three one-day workshops are planned for farm operators and Fisheries Department technicians.
- Seafood HACCP Courses: To strengthen the processing plant sector two, 2-day HACCP courses will be taught.



BAP Training



Seafood HACCP Training



**Fish & Fisheries
Products & Hazards &
Control Guidance:
Third Edition
June, 2001
“The Purple Book”**



Malaysia Survey Results: Hatcheries

Standard	Critical Items	Scored Items
2 - Community Relations	100%	70%
4 - Ecosystem Protection	78%	100%
6 - Storage & Disposal of Hatchery Supplies	100%	92%
Traceability Requirement	0%	100%
Std 2: Meetings w community, Std 4: Control escapes		



Malaysia Survey Conclusions: Hatcheries

Conclusion:

- No major issues found at hatcheries surveyed,
-assuming traceability compliance.



Malaysia Survey Results: Farms

Standard	Critical Items	Scored Items
2 - Community Relations	100%	62%
4 – Mangrove Conservation	79%	100%
5 - Effluent Management	19%	100%
9 - Storage - Disposal Farm Supplies	88%	88%
Std 2: Meetings w community, Std 4: Control escapes, Std 9: Fuel storage, signage		



Malaysia Survey Results: Farms, cont'd

Standard	Critical Items	Scored Items
11 - Microbial Sanitation	94%	100%
12 - Harvest and Transport	50%	100%
Traceability Requirement	50%	NA

Std 11: Manure as fertilizer. Std 12: Temp. monitoring, no worker inspection. Traceability: Not using

TraceRegister



BAP Training in Malaysia: BAP and HACCP

- **BAP certification criteria include many areas not covered by the DOF program.**
- **HACCP courses specifically for seafood plants with emphasis on aquaculture products and US FDA guidelines**



Malaysia Survey Conclusions: Farms

Conclusions: Major Issues

- Effluent monitoring will have to be brought into compliance. This could be accomplished through a combination of government programs and farm sampling.
- Harvested product and worker health monitoring will need to be implemented.
- Traceability will need to be brought into compliance with BAP requirements.



Malaysia Survey Results: Plants

Standard	Overall
2.3 Food Safety Management Component	40%
5.4 Food Safety: Pest Control	80%
5.4 Food Safety: Plant Maintenance	80%
BAP - Annex 3 Standard 1.0 Effluent Records	80%
BAP - Annex 4 Standard Traceability	0%



Malaysia Survey Conclusions: Plants

Conclusions: Major Issues

- Plants that had a GFSI benchmarked audits (2/5) scored very well.
- In some cases, plants overlooked the importance of monitoring for aquaculture drugs as a HACCP Critical Control Point (CCP).
- Effluent monitoring will need to be expanded to include all BAP parameters. The Ministry of Environment MOE is monitoring for some parameters but not the complete BAP list.



Malaysia Survey Conclusions: Plants, cont'd

Conclusions: Major Issues

- Traceability will need to be brought into compliance with BAP requirements.



BAP Training in Malaysia

One of the long term goals of the GAA is to improve aquaculture practices worldwide.

We believe that the Malaysia BAP Training Program can serve as a viable model for other countries. Improved aquaculture practices will not only enhance product quality, their adoption promotes environmental and social responsibility.

