



ASIAPACIFIC-FISHWATCH CONCEPT AND THE WOLF HERRINGS (*CHIROCENTRUS* SPP) AS EXAMPLE

Meryl Williams
Asian Fisheries Society



Consumer information on fish is a well kept secret in Asia-Pacific

- Asian Fisheries Society is starting AsiaPacific-FishWatch, an online project to
 - ... explain about Asia-Pacific fish products eaten locally and in major world markets
 - ... provide authoritative, accessible information for consumers, the general public, fish exporters and importers, fisheries managers, aquaculturists, fishers and scientists



Photo: New Straits Times 6 July 2008

Fish Facts for All



Fish buyer making a decision, Pasar Berserhati, Manado

Photo: M. Williams

- People could use information that is
 - accessible and authoritative
 - addresses their concerns on
 - price
 - safety
 - nutrition
 - sustainability
 - food security, fair trade

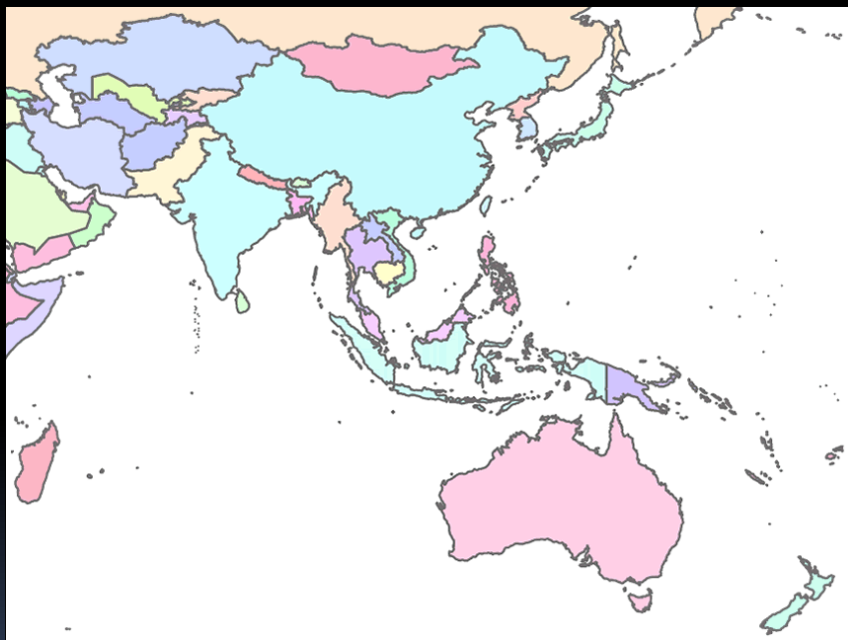
A Focus on people



Yellowfin tuna, Pasar Berserhati, Manado
Photo: P. Kailola

- From the water to the mouth
 - and steps in between
 - including women's roles
- Different supply chains for different markets
 - fresh and processed local
 - distant urban
 - fresh and processed export
 - re-processed

Scope and scale



- Asia and western Pacific regions
- Initial priority on edible species
 - aquaculture and fisheries
- About 100 species/groups in 1st phase (1/3 of world fish)
- Criteria include
 - >100,000 t production
 - high value
 - at least top 3 producing countries

Wolf herrings as an example

- Clupeoid
- 2 species
 - *Chirocentrus dorab*
 - *Chirocentrus nudus*

Chirocentrus dorab
Dorab wolf herring



Chirocentrus nudus
White-finned wolf herring

Photos: J. Randall

The basic species structure

AsiaPacific-FishWatch

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Wolf herrings (*Chirocentrus* spp)

Wolf herrings – (*Chirocentrus* spp) <Pilot species – Work in Progress>

Photos: J.Randall (left: *C. dorab*; right: *C. nudus*)

[Sustainability](#)

[Identification
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[Top 3
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Sourcing information

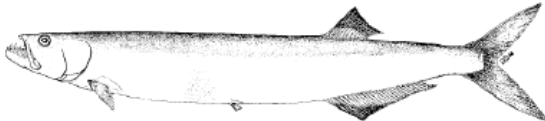
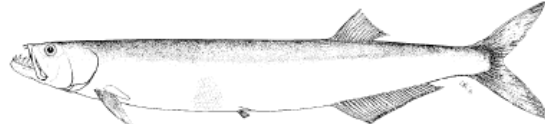
- All information will be properly acknowledged
- FAO various, including FishSTAT
- FishBase, FishBOL,
- Scientific literature, books and other sources from Internet
- Personal expert contacts
- Observations in the field, market



Fish seller, Goa, India Feb. 2010

Finding out what users want

- Short user questionnaire
 - 76 responses at 5 workshops (2009-11)
 - Soon to go online
 - What is the common name?
 - Have you eaten it and how?
 - Do you like eating it?
 - What would you like to know about it?

WOLF HERRINGS <u>Chirocentrus dorab</u> and <u>C. nudus</u>
Common names <u>Chirocentrus dorab</u> : dorab wolf herring (FAO, Australia), blackfin wolf-herring, parang-parang (Indonesia, Malaysia, Philippines), ikan parang (Malaysia), golok-golok Indonesia, <u>Cá Dừa</u> and <u>Cá Rựa</u> (Vietnam), ??? Thailand  - <u>Chironcentrus nudus</u> : whitefin wolf herring (FAO, Australia), parang, parang-parang (Indonesia, Malaysia, Philippines), 
Common group name wolf herrings.
DESCRIPTION Wolf herrings are long, highly laterally compressed fishes in the same group as herrings, sardines, pilchards, sprats, shads and anchovies. Wolf herrings are common coastal fish from the western Pacific (Solomon Islands) to east Africa.
Do you know this fish? Yes/No What country do you currently live in? <u>Country:</u>
If <u>Yes</u> , what common name do you use for it in your country? <u>Name:</u> <u>Country:</u>
Have you ever eaten it? Yes/No
If <u>Yes</u> , in what form did you eat it (e.g., in soup, fillet, fish ball, dried, etc)?
Where did you eat it and buy it (e.g., home, restaurant, buy from market, etc)?
Do you like eating this fish and why?
As a consumer, what information would you like to have about this fish (e.g., its nutritional value, where it was caught, how, is it safe etc etc)?

When completed, please return to Meryl Williams

Info gaps and blind spots (1)

- Few countries report catch to FAO (9 only in 2008, 13 ever)
 - E.g., Vietnam does not report as species
- Total identified catch
 - 74,413 t (2008)
- Species confusion?
 - *C. dorab* (4 countries)
 - *C. nudus* (2 countries)
 - *C. nei* (unident.) (7 countries)

IMPORTANT FISH IN XUAN THUY NATIONAL PARK

Xuan Thuy National Park is the first Ramsar site of international importance in Vietnam. It is a rich, biodiverse wetland with significant mangroves and mudflats that are home to important migratory waterbirds.

The national park also supports an important wild harvest fishery and is vital to the future of fisheries production in the area.



Mauritian sardinella <i>Sardinella jussieu</i>	Elongate ilisha <i>Ilisha elongata</i>	Giant sea-catfish <i>Arius thalassinus</i>
Spotted scat <i>Scatophagus argus</i>	Common ponyfish <i>Leiognathus equulus</i>	Silver pomfret <i>Pampus argenteus</i>
Barramundi <i>Lates calcarifer</i>	Dorab wolf-herring <i>Chirocentrus dorab</i>	Yellowstripe scad <i>Selaroides leptolepis</i>
Indo-Pacific king mackerel <i>Scomberomorus guttatus</i>	Doublespotted queenfish <i>Scomberoides lysan</i>	Narrow-barred Spanish mackerel <i>Scomberoides commerson</i>
Fourlined tonguesole <i>Cynoglossus bilineatus</i>	Chinese gizzard shad <i>Clupeoidon thryssa</i> Listed as Vulnerable in the Red Data Book of Vietnam	Bastard halibut <i>Paralichthys olivaceus</i>

Let's protect the fish by:

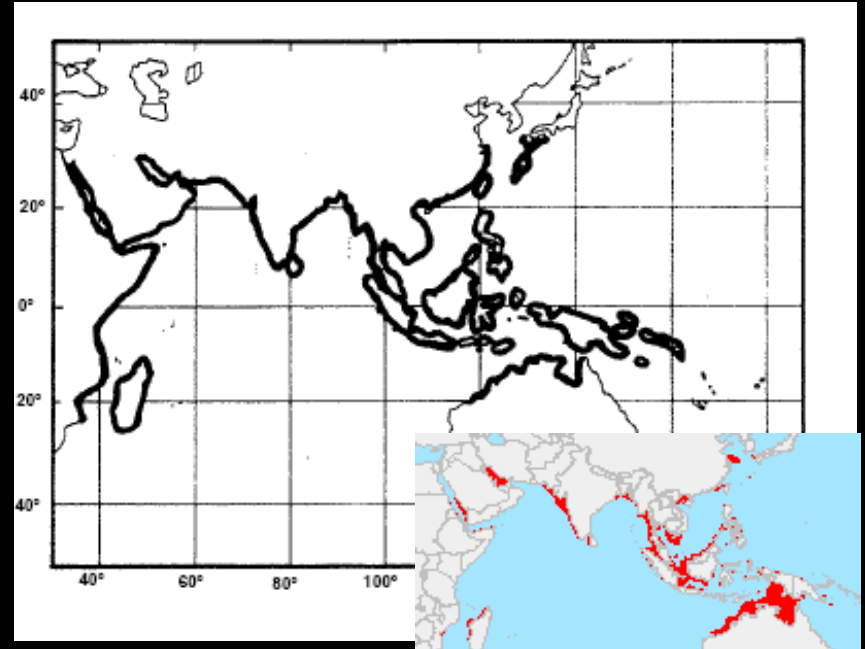
- Preserving the wetlands ecosystem
- Stopping overfishing
- Preventing destructive fishing
- Catching species at a suitable size
- Protecting species that are under threat

Let's protect aquatic resources for our future!

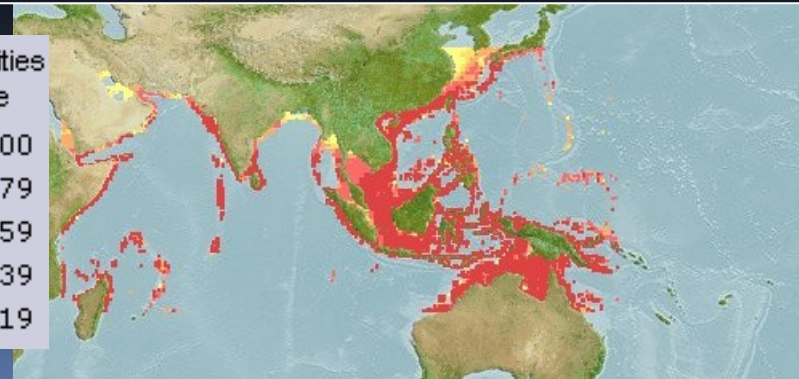
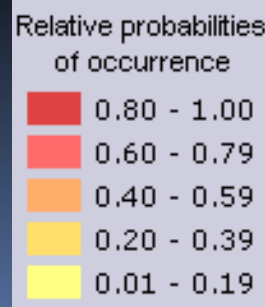


Info gaps and blind spots (2)

- Distribution not fully clear
 - FAO, OBIS etc
 - Based largely on museum records
 - Missing east coast Australia, Fiji etc
 - FishBase
 - Some unreviewed estimates based on modeling suitable habitat ranges (Aquamaps)
 - Missing Fiji, offshore range likely too large



Above: FAO Species Synopsis, FIGIS (insert)
Below: FishBase Aquamaps (unreviewed)



Species distinctions (1)

- Very difficult to distinguish species visually
- Most authoritative work done by Dr G Luther , CMFRI India
- Studied *Chirocentrus* spp in Gulf of Mannar, 1964-69
- Ph D and published papers in Indian journals (1980s)
 - J. mar. biol. Ass. India, etc
- Similar but different biologies
- 80% of catch was *C. nudus*



Species distinctions (2)

- Most articles simply refer to *C. dorab* or the 'dorab wolf-herring'
- But
 - 100% *C. nudus* at Penang local markets (2 years observations)
 - E. coast Australia baitfish may be mainly *C. nudus*
- So what is the real species composition?



Chirocentrus nudus
Batu Lanchang fish market, Penang

Common and market names

- FAO: wolf-herring
- FishBase lists many common names
- AsiaPacific-FishWatch will distinguish the official market names in each country, e.g., ikan parang (Malaysia)



Wolf-herring among mixed fish
Batu Lanchang market, Penang, 2011

A plethora of consumer options



A plethora of consumer options

- Also fresh, fried, dried, in soup, sashimi
- Differing views on taste (on balance highly positive)
- Bony – but concept needs refining!
- High levels of poly-unsaturated fatty acids
- Also well-regarded recreational fish by anglers; and top baitfish for gamefish (Australia)



Dried wolf-herring, Medan market
Dec 2010

Production, trade, top 3 countries

- Caught in coastal drifting gill nets
- As officially reported
 - Indonesia
 - India
 - Thailand
 - Also Malaysia, Iran, Pakistan, Philippines, Saudi Arabia, Singapore
- Little international trade
 - Some product requests from China



Penang gill-net boats

Sustainability, environment

- Multi-species fisheries
- No stock assessments
 - But large specimens rare
- High trophic level feeder



Single large wolf-herring
Batu Lanchang markets,
Penang Feb 2010

http://asiapacfishwatch.org/

AsiaPacific-FishWatch

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Welcome to the new AsiaPacific-FishWatch site!

Posted on [January 9, 2011](#) | [Leave a comment](#)

The [Asian Fisheries Society](#) is developing an online information system for Asia-Pacific fisheries and aquaculture products. This authoritative information system will engage the knowledge and expertise of hundreds of regional fisheries and aquaculture experts and all key institutions.

We are taking a whole of supply chain approach, covering information on **sustainability, identification and biology, environment, production, trade**, details from the **top 3 producing countries** for each commodity/species group and giving up to date references and further links.

The previous site for AsiaPacific-FishWatch is also still active and contains information on planning meetings and pilot species (<http://sites.google.com/site/fishwatchasiapacific/Home>)

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ASIAPACIFIC-FISHWATCH

Our aim is to explain Asia-Pacific fish products eaten locally and in major world markets through providing authoritative, accessible information for consumers, the general public, fish exporters and importers, fisheries managers and scientists. A project of the Asian Fisheries Society and partners.

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EXPERTS AND FISH EATERS WANTED!

Building on Know How



Expert Planning Meeting, Manado May 2010

- Using and sharing experiences
 - from NOAA's FishWatch, NACA, SEAFDEC, INFOFISH, China fisheries information system, Australian fisheries atlas
- Linking with relevant fish information systems
 - e.g., NOAA FishWatch, FAO, FishBase, FishSource