FOURTH INTERNATIONAL SYMPOSIUM ON GIS/SPATIAL ANALYSES IN FISHERY AND AQUATIC SCIENCES

PROGRAM

(DO NOT USE THE PRELIMINARY PROGRAM APPEARED IN THE SEPARATE ABSTRACT PROCEEDINGS. USE THIS FINAL VERSION)

Universidade Santa Úrsula

Rio de Janeiro, Brazil

August 25(Mon)-29(Fri), 2008

FISHERY - AQUATIC GIS RESEARCH GROUP

SERVIAM

Universidade Santa Úrsula
Instituto de Ciências Biológicas e Ambientais
Rio de Janeiro - Brasil

INTERNATIONAL FISHERY GIS SOCIETY

CONTENTS

ERRATA in the abstract proceedings

Page 3: On the left top corner, Key note speech is missing

Important note for participants

- Registration

Room 104, University Auditorium
Open from 4-6 PM, Aug 24 (SUN) and 8AM-5PM Aug 25(MON)-29(FRI)

All participants are requested to report to the reception desk (room 104, Auditorium) for registration. At the reception you will pick up an envelope with your name containing an abstract booklet, this program, your name badge and other information.

If participants have not yet paid the registration fee, pay the late fee (US$400) by cash (US$ 400, EURO 250 or 600 R$), credit cards or check.

- If you need help….

If you need helps for any matters please do not hesitate to contact the local organizers (room 105), organizers (room 104) or symposium helpers who wear the symposium helper's T shirts.

- Updated program

This program booklet contains the updated program. The one appeared in the abstract proceeding show the old version (as of July 24, 2008). Do not use that and use the program in this booklet.

- Wireless and PC services

Wireless net work services are available in the plenary room (Auditorium) and the Auditorium Hall. In addition a limited number of PCs with the internet are available in Room 105.

- Lunch

The lunch time is from 12:40-2PM. There are various restaurants, fast food restaurants and shops (see the Map). Feel free to ask more details to the local staff and helpers.

- Are you lost?

Please keep the venue address and the Portuguese direction separately (cut the page 5 and keep it in your wallet).

Important note for presenters

- **FOR ORAL PRESENTERS INCLUDING KEY NOTE SPEAKERS (RE: POWERPOINT)**

In the oral presentation we will use one COMMON lap top PC (OS: English Window XP) with MS Office 2007. We suggest to make PowerPoint by MS Office 2007 because if you use other versions of MS Office software (e.g., MS Office 1997-2003), sometime **letters and line alignments will not properly appear on the screen as you make and expect**.

In addition as we don't use any other lap top PC driven by other OS such as Mac etc, we suggest to make your PowerPoint by Window XP with MS office 2007.

Please **make PowerPoint in English with a large FONTS.**

Please note that we don't prepare any other projectors such as for OHP, slides, 35mm etc.

Before your oral presentation you are requested to copy your PowerPoint files to the common lap top PC during the registration periods [4-6PM, Aug 24(SUN) or 8-9AM Aug 25(MON)-29(FRI)] or during tea/coffer breaks or lunch time.

In your PowerPoint file please make the **file name** with your last name + your registration number, for example, **SCOTT (121).**

In the desktop screen of the common lap top PC we prepare 5 folders by day from Aug 25(MON), Aug 26(TUE)..... Aug 29(FRI). So please copy your PP files to the folder indicating your presentation day.

- FOR POSTER PRESENTERS

Poster presentation (A0 size: W 841 mm x H 189mm) will be held in Room 103, Auditorium. You are required to stay and explain your posters from 2:40-5PM, Aug 26 (Tue) and 4-6PM, Aug 27(Wed). Please prepare your poster before the start time. Pins and tapes to stick your posters to the poster stands are available.

- FOR PC DEMO PRESENTERS

PC demo will be held in the Auditorium Hall, the same area for the tea/coffee breaks. You are required to stay and demonstrate your software, systems etc from 2:40-5PM, Aug 26 (Tue) and 4-6PM, Aug 27(Wed). Please prepare your GIS systems in your PC before the start time. Tables with chairs, wireless internet and AC powers are available.

Cut this page out and keep it in your wallet

[SYMPOSIUM VENUE]

The 4th Symposium will take place at Universidade Santa Úrsula, where the co-organizer, Dr Philip Scott can be found. The contact point is as below:

Professor Philip Scott
Instituto de Ciências Biológicas e Ambientais
(Institute of Biological and Environmental Sciences)
Universidade Santa Úrsula,
Rua Jornalista Orlando Dantas 59, Botafogo 22231-010
Rio de Janeiro – RJ, Brazil
E-mail : philip@laquasig.bio.br
Phone : 55(Brazil)-(0 for domestic)-21 2553-4310 or 2552-2500
FAX : 55(Brazil)-(0 for domestic)-21 2551-6446
For TEL/FAX from within Brazil but outside Rio de Janeiro state, include 031 before TEL/FAX no.

[DIRECTION TO THE VENUE IN PORTUGUESE (FOR TAXI DRIVER)]

For Taxi driver:

Universidade Santa Úrsula,

Auditório - na Rua Farani, 42 (sobreloja)

Praia de Botafogo

– SYMPOSIUM WORKING MEMBERS –

Titles	Name and ( ) Registration number	Country/Int. ORG.
Organizer	ITOH (119)	Japan
Local organizers	SCOTT(121) VÖLCKER (158)	Brazil Brazil
Convener	NISHIDA (118)	Japan
Moderators *(alphabetical order of the last names)*	Aguilar (172) Aguilar-Manjarrez (124) Brakel (137) Carocci (123) Claus (78) Flitcoft (135) Geitner (140) Haynie (155) Lu (173) Meaden (126) Murfitt (144) Ni (178) Ross (162) Taylor (167) Wood (183)	Philippines FAO WorldFish Center FAO Belgium USA. Denmark USA. Taiwan UK Canada Taiwan UK USA NZ
(Panel discussion Sum-up Session) Panelists and Rapporteurs *(alphabetical order of the last names)* Chair Meaden (126) Chief rapporteur Mundy (139)	Carocci (123) Fisher (108) Haynie (155) Kapetsky (125) Meaden (Chair, 126) Wood (183) *Rapporteurs* (Chief) Mundy (139) Aguilar-Manjarrez (124) Kleisner (191) Murfitt (144) Sellars (145) Stelzen-Müller (111)	FAO USA USA USA UK NZ Australia FAO USA Canada NZ UK
Photographers	NAGANOBU (161) KLEISNER (191)	Japan USA
Registration and Receptionist (Room 104)	MATSUO(120) ITOH(119)	Japan Japan
Technical assistants & secretaries (office in Japan)	OYAMA SHIBA	Japan Japan

Symposium helpers

last name	VÖLCKER (LEADER)	MAFRA	BONETTI	ANDRADE	TAABU	SILVESTRI	MELLO	SOUZA	FREITAS	MICELI
reg no	158	154	142	153	115	149	114	159(USU)	112	157(USU)
country	Brazil	Brazil	Brazil	Brazil	Uganda	Brazil	Brazil	Brazil	Brazil	Brazil
role	supervisor	Symposium helpers								
Aug 24 (Sun) (4-	registration									
Aug 25 (Mon) (8-9AM)			registarion							
Aug 25 (Mon)	Supervise helpers' duties and help if needed (Oral on Aug 26)		time keeper	Oral	tea	mic	tea			mic
Aug 26 (Tue)		tea		tea	time keeper	Poster	mic	mic	Poster	Poster
Aug 27 (Wed)			time keeper	tea	tea	Poster	mic	mic	Poster	Poster
Aug 28 (Thu)		tea	Oral	time keeper	Oral	mic		tea	mic	
Aug 29 (Fri)		time keeper				tea	tea	Oral	mic	mic
meeting [A] Aug 24 (SUN) 5PM [B] Aug 25(MON) 8AM	**[A][B]**	**[A]**	**[B]**	**[A]**	**[B]**	**[B]**	**[A]**	**[A]**	**[B]**	**[B]**

Oral or Poster : helper's presentation date and method (oral or poster) (no duty asssigned)

Summary of the presentations

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THEMES

"FUTURE OF GIS", "SPATIAL DECISION SUPPORT IN AQUACULTURE", "ECOSYSTEM APPROACH TO AQUACULTURE (EAA)" AND "ECOSYSTEM APPROACH TO FISHERIES (EAF)"

THIS SYMPOSIUM HAS FOLLOWING FOUR SESSIONS:

(I) ORALS, (II) POSTERS, (III) GIS DEMONSTRATIONS WITH PCS AND (IV) PANEL DISCUSSION

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Number of presentations: 99 number of participants: 82 (as of Aug., 16, 2008)

Number of presentations by method and area

Presentation method	Area	Subject	no.	Sub total	total
Key note speech					5
Oral	Systems	Concepts	3	14	66
		Information systems and Software	5		
		Education	1		
		Monitoring systems	5		
	Site selection	Fresh water aquaculture	5	9	
		Mariculture	2		
		Identifying life history sites of marine fish	2		
	Ecosystem Approach	Aquaculture and inland fisheries	1	7	
		Marine fisheries	6		
	Socio economics	Aquaculture	1	2	
		Marine fisheries	1		
	Managements	Fresh water	3	21	
		MPA	7		
		Assessments and predictions	3		
		Offshore and distant waters fisheries	4		
		Sport fisheries	1		
		Costal fisheries	3		
	Habitats	Marine	7	10	
		Fresh water	3		
Poster					16
PC demo	12 demos by 10 presenters				12
Grand total					99

Outline of the program (page numbers of the abstracts by subject)

Time	Aug 24 (Sun)	Aug 25 (Mon)	Aug 26 (Tue)	Aug 27 (Wed)	Aug 28 (Thu)	Aug 29 (Fri)	Time
8AM-6PM		Registration and reception desk					8AM-6PM
09:00-09:20		Openings Group photo Tea break	key note (Spatial decision support in Aquaculture) (P. 23)	Key note (EAA) (p.39)	Management (MPA) (p.59-66)	Habitat (Marine) (p. 85-93)	09:00-09:20
09:20-09:40							09:20-09:40
09:40-10:00			Site selection (Fresh water & aquaculture) (p. 24-28)	Key note (EAF) (p. 40-41)			09:40-10:00
10:00-10:20							10:00-10:20
10:20-10:40				Ecosystem(fresh) (p.42)			10:20-10:40
10:40-11:00			Tea break				10:40-11:00
11:00-11:20		Key note (Future GIS) (p. 3)	Site selection (Fresh water & aquaculture and Mariculture) (p. 29-31)	Ecosystem (marine) (p.43-49)			11:00-11:20
11:20-11:40							11:20-11:40
11:40-12:00		Systems (concept) (p. 4-6)			Management (assessment & prediction) (p. 67-71)	Habitat (Fresh water) (p. 94-97)	11:40-12:00
12:00-12:20							12:00-12:20
12:20-12:40							12:20-12:40
12:40-14:00		LUNCH					12:40-14:00
14:00-14:20		Systems (information systems, software and education) (p. 7-13)	Site selection (identifcation of sites) (p. 32-35)			Panel discussion	14:00-14:20
14:20-14:40				Socio economics (p.51-52)	Management (offshore, distant waters and sport fisheries) (p. 72-77 and p. 82)		14:20-14:40
14:40-15:00			Poster presentation (p.101-120) and PC demo (p. 123-135) with tea & coffee				14:40-15:00
15:00-15:20				Management (fresh water) (p.53-56)			15:00-15:20
15:20-15:40							15:20-15:40
15:40-16:00		Tea break			Tea break		15:40-16:00
16:00-16:20	Registration	Systems (Monitoring systems) (p. 14-19)		Poster presentation (p.101-120) and PC demo (p.123-135) with tea & coffee	Management (coastal fisheries) (p.78-80)	Closings	16:00-16:20
16:20-16:40							16:20-16:40
16:40-17:00							16:40-17:00
17:00-17:20							17:00-17:20
17:20-17:40							17:20-17:40
17:40-18:00							17:40-18:00
18:30-20:30		Ice breaking party					18:00-20:00
19:30-21:30				Dinner			19:30-21:30

August 25 (Monday) (Plenary at the Auditorium)

Time	Presentation method	Agenda	Subject	Speeches and papers	Presenter	Country	Page (abstract)	Reg. no	Moderator	Time keeper	MIC distributor
8AM-6PM	**Registration (Room 104)**										
09:00-11:00	**Openings**		**Welcome speeches** (4) (10-15 minutes each)	**Organizer**	**ITOH**	Japan		119	**NI (Taiwan, 178)**		
				Local organizer	**SCOTT**	Brazil		121			
				University Chancellor (President)	**RAMOS**	Brazil		193			
				Fisheries Minister	**GREGOLIN**	Brazil		192			
			Remarks (1)	**Convener**	**NISHIDA**	Japan		118			
	Group photos			**Photographers**	**NAGANOBU KLEISNER**	Japan USA		161 191			
	Tea break [helpers : TAABU(115) and MELLO (114)]										
11:00-11:40	**Oral presentation**	**Key note speech (1)**		The Future of GIS and Spatial Analyses in Fisheries: Challenges and Opportunities	**FISHER**	USA	3	108	**LU (Taiwan, 173)**	**BONETTI (142)**	**SILVESTRI (149) and MICELI (157)**
11:40-12:00		**Concepts, Systems & Education (14)**	**Concept (3)**	The role of interoperable standards based applications in enabling enterprise wide fishery and environmental data management & access	**WOOD**	NZ	4	183			
12:00-12:20				A framework for storing, retrieving and analysing marine ecosystem data of different origin with variable scale and distribution in time and space	**WESTGÅRD**	Norway	5	136			
12:20-12:40				A robust, low cost, spatially enabled, semi-automatic fishery survey data capture system and GIS	**WOOD**	NZ	6	183			
12:40-14:00			**Lunch**								
14:00-14:20			**Information systems and Software (5)**	A GIS interface to the French Fisheries Information System of Ifremer	**HARSCOAT**	France	7	133	**WOOD (NZ, 183)**		
14:20-14:40				A Web GIS developed for fishery and habitat information integration within Territorial Sea and Coastal Zones in Taiwan	**LU**	Taiwan	8-9	173			
14:40-15:00				New Zealand's National Aquatic Biodiversity Information System (NABIS) – lessons learnt on how to make a web mapping tool easy to use	**SELLARS**	NZ	10-11	145			
15:00-15:20				Information System for the Request of Exploitation Permits for Aquaculture in Federal Water Bodies in Brazil – SINAU	**ANDRADE**	Brazil	12	153			
15:20-15:40				14 years of Marine Explorer (ME) (Marine GIS) development and introduction to case studies mitigating high fuel price problem using the ME	**ITOH**	Japan	13	119			
15:40-16:00			**Education (1)**	Capacity building for GIS in the developing countries using the Marine Explorer	**NISHIDA**	Japan	**NA**	118			
16:00-16:20			**Tea break [helpers : TAABU(115) and MELLO (114)]**								
16:20-16:40			**Monitoring systems (5)**	ICES EcoSystemData – Visualising data for the ecosystem approach	**PINTO**	ICES	14-15	160	**TAYLOR (USA, 167)**		
16:40-17:00				Development of a towed high resolution optical and acoustic imaging system for scallop (*Placopecten magellanicus*) assessment and Ecosystem-Based Management	**TAYLOR**	USA	16	167			
17:00-17:20				The use of GIS in a multi-sensor approach for sea surface monitoring in southern Brazil	**BENTZ**	Brazil	17	176			
17:20-17:40				NICAMS: a spatially enabled image analysis tool for photographic transect surveys	**WOOD**	NZ	18	183			
17:40-18:00				Dynamic Maps for Fishing Monitoring	**LESSA**	Brazil	19	169			
18:30-20:30	**The ice breaking party is hosted by the University Chancellor (President) (Professor Jeanete RAMOS) at O Casarão [address] Rua Jornalista Orlando Dantas, 36. (for details see the Map)**										

August 26 (Tuesday) (Plenary at the Auditorium)											
Time	**Presentation method**	**Agenda**	**Subject**	**papers**	**Presenter**	**Country**	Page (abstract)	**Reg. no**	**Moderator**	**time keeper**	**MIC distributor**
8AM-5PM	**Registration (Room 104)**										
09:00-09:40	**Oral Presentation**	**Key note speech(1)**	Spatial Decision Support in Aquaculture: The role of Geographical Information Systems and Remote Sensing		**ROSS**	UK	23	162	AGUILAR-MANJARREZ (FAO, 124)	**TAABU (115)**	**MELLO (114) and SOUZA (159)**
09:40-10:00		**Site selection (9)**	**Fresh water aquaculture (5)**	Integrating socio-economic data into a spatial framework for aquaculture development	**BRAKEL**	WorldFish Center	24	137			
10:00-10:20				Developing a GIS-based decision support tool for identifying potential freshwater aquaculture sites	**BAKELAAR**	Canada	25	117			
10:20-10:40				The Use of Geographic Information System (GIS) for the Evaluation of Land Based Fresh Water Fish Farming Potentials in Nigeria	**ABDULLAH**	Nigeria	26	168			
10:40-11:00				**Tea break [helpers: MAFRA (154) and ANDRADE (153)]**							
11:00-11:20				Spatial modelling for freshwater cage location in the Presa Adolfo Lopez Mateos (El Infiernillo), Michoacán, Mexico	**ROSS**	UK	27	162			
11:20-11:40				GIS and remote sensing supported aquaculture potential assessment for the lower stretchof the SÃO JOÃO River - RJ, Brazil	**VÖLCKER**	Brazil	28	158			
11:40-12:00			**Mariculture (2)**	The potential for open ocean aquaculture in Exclusive Economic Zones from global and national perspectives	**KAPETSKY**	USA	29	125	**Ross (UK, 162)**		
12:00-12:20				Integration of remote sensing and GIS for identification of suitable areas for Japanese scallop aquaculture in Funka Bay, southwestern Hokkaido, Japan	**RADIARTA**	Japan	30	134			
12:20-14:00			**Lunch**								
14:00-14:20			**Identifying life history sites of marine fish (2)**	Geomorphological habitat of Nassau grouper, *Epinephelus striatus* , spawning aggregation in Belize	**KOBARA**	USA	33	116			
14:20-14:40				Identification of Nursery grounds along Italian waters at GSA spatial scale level	**MURENU**	Italy	34-35	181			
14:40-17:00	**Poster presentations (Room 103) and PC demo (Auditorium Hall: Coffee break area) with tea & coffee [helpers for tea & coffee : MAFRA (154) and ANDRADE (153)]**										

August 27 (Wednesday) Plenary at the Auditorium											
Time	**Presentation method**	**Agenda**	**Subject**	**papers**	**Presenter**	**Country**	**Page (abstract)**	**Reg. no**	**Moderator**	**time keeper**	**MIC distributor**
8AM-6PM	**Registration and help (Room 104)**										
09:00-09:40	**Oral presentation**	**Key note speech (4)**		A review of the status of GIS, remote sensing and mapping in addressing the principles, objectives and practices of the ecosystem approach to aquaculture (EAA)	**KAPETSKY**	USA	39	125	**BRAKEL (WorldFish Center, 137)**	**BONETTI (142)**	**MELLO (114) and SOUZA (159)**
					AGUILAR-MANJARRE	FAO		124			
09:40-10:20				A review of the status and potential of GIS in implementing the ecosystem approach to fisheries (EAF)	**CAROCCI**	FAO	40	123			
				Towards the use of GIS for an Ecosystems Approach to Fisheries Management: CHARM 2 - A Case Study from the English Channel	**MEADEN**	UK	41	126			
10:20-10:40		**Ecosystem approach (7)**	**Aquaculture and inland fisheries (1)**	An agro-ecosystems approach to aquaculture and inland fisheries: fish out of the water?	**BRAKEL**	WorldFish Center	42	137			
10:40-11:00			**Tea break [helpers: ANDRADE (153) and TAABU (115)]**								
11:00-11:20			**Marine fisheries (6)**	Study of Some of the Environmental Characteristics of the Ecosystem of the Strait of Khuran in the Persian Gulf	**ZAKER**	Iran	43	131	**CAROCCI (FAO, 123)**		
11:20-11:40				Geospatial dynamics of Northwest Atlantic cod and crustacean fisheries in the 1990s and 2000s: environmental and trophic impacts	**WINDLE**	Canada	44	138			
11:40-12:00				Identifying spatial and temporal trends of fishery resources towards an ecosystem approach	**FERRANDIS**	Spain	45	190			
12:00-12:20				Relationships between oceanographic environment and distribution of krill and baleen whales in the Ross Sea and adjacent waters, Antarctica in 2004/05	**NAGANOBU**	Japan	46-47	161			
12:20-12:40				Reef ecology and fisheries analysis: a case study of GIS and RDBMS application	**MWAURA**	Kenya	48-49	113			
12:40-14:00				**Lunch**							
14:00-14:20				Integrated ecosystem approach for sustainable tuna longline fisheries (Case study: tropical tuna in the Indian Ocean)	**NISHIDA**	Japan	50	118			
14:20-14:40		**Socio economics (2)**	**Aquaculture (1)**	Spatial analysis for poverty targeted aquaculture development: what works and what doesn't?	**BRAKEL**	WorldFish Center	51	137	**MEADEN (UK, 126)**		
14:40-15:00			**Marine fisheries (1)**	Decrease in fishermen with aging in Japan: geodemographic and labor scientific analyses of set net fishery in rural and suburban regions	**WATANABE**	Japan	52	188			
15:00-15:20		**Management (23)** *(continued to Aug 28)*	**Fresh water (3)**	The use of the geographical information system (GIS) for management of the fisheries in the floodplain lakes at the Meddle Solimões Region - Amazon - Brazil	**R. SOUSA**	Brazil	53	122			
15:20-15:40				Integrated management of river basin and coastal zone: land-use, river flow and management zones	**BARROSO**	Brazil	54-55	165			
15:40-16:00				Spatial scales and landscape variables: Geoinformation contributing for fisheries management in Central Amazonian lakes	**K. SOUSA**	Brazil	56	164			
16:00-18:00	**Poster presentations (Room 103) and PC demo (Auditorium Hall: Coffee break area) with tea & coffee [helpers for tea and coffee: ANDRADE (153) and TAABU (115)]**										
19:30-21:30	**Symposium dinner (for details see the Map)**										

August 28 (Thursday) Plenary at the Auditorium											
Time	**Presentation method**	**Agenda**	**Subject**	**papers**	**Presenter**	**Country**	**Page (abstract)**	**Reg. no**	**Moderator**	**time keeper**	**MIC distributor**
8AM-5PM	**Registration (Room 104)**										
09:00-09:20	**Oral presentation**	**Management (23)**	**MPA (7)**	Optimal Marine Closure Design	**HAYNIE**	USA	59	155	**AGUILAR (Philippines, 172)**	**ANDRADE (153)**	**SILVESTRI (149) and FREITAS (112)**
09:20-09:40				A novel technique for assessing sea-bed sensitivity to potential threats in Marine Protected Areas	**BREEN**	UK	60	141			
09:40-10:00				GIS tools necessary for a complete biodiversity management within a Marine Protected Areas Network	**DUQUE ESTRADA**	Brazil	61	152			
10:00-10:20				Coastal habitat mapping of Nogas Island, Philippines for conservation and management	**AGUILAR**	Philippines	62	172			
10:20-10:40				Spatial distribution assessment of small scale fishing activity from fishermen surveys : Case Study of the Banc d'Arguin National Park (Mauritania)	**GRAS**	Sénégal	63	132			
10:40-11:00				**tea break [helpers : MAFRA (154) and SOUZA (159)]**							
11:00-11:20				GIS and spatial metrics applied to the analysis of the composition and structure of seabed marine landscapes in Brittany	**BONETTI**	Brazil	**64-65**	142	**MURFITT (Canada, 144)**		
11:20-11:40				Geographic Information System as tool to manage octopus fishery in the Veracruz Reef System National Park, Mexico National Park, Mexico	**JIMENEZ**	Mexico	**66**	180			
11:40-12:00			**Assessment and prediction (3)**	Modeling, mapping and predicting the spatial distribution of pelagic fishery resources	**KLEISNER**	USA	**67**	191			
12:00-12:20				Estimated Sustainability of a Commercial Geoduck Harvest Area with Resident Sea Otter Predation	**MURFITT**	Canada	**70**	144			
12:20-12:40				Recent trends in distribution and abundance of commercial fish stocks in Lake Victoria (East Africa) based on GIS representation from of Acoustic surveys	**TAABU**	UGANDA	**68-69**	115			
12:40-14:00			**Lunch**								
14:00-14:20			**Offshore and distant waters fisheries (4)**	A spatial and temporal analysis of New Zealand's commercial trawl and dredge data.	**WOOD**	NZ	72	183	**HAYNIE (USA, 155)**		
14:20-14:40				Assessing the vulnerability of selected fish in UK waters to aggregate extraction: Toward a spatially explicit risk assessment for marine management	**STELZEN-MÜLLER**	UK	73	111			
14:40-15:00				Using Vessel Monitoring System Data to Estimate Spatial Effort for Unobserved Vessels in the Bering Sea Pollock Fishery	**HAYNIE**	USA	76	155			
15:00-15:20				Visualization techniques using GIS as a tool for managers of fishery resources: an example from the Northern Gulf of Mexico	**RIEDEL**	USA	77	107			
15:20-15:40			**Sport fisheries (1)**	Geospatial applications to assess recreational fisheries at Palma Bay	**MARCH**	Spain	82	148	**CLAUS (Belgium, 78)**		
15:40-16:00			**tea break [helpers : MAFRA (154) and SOUZA (159)]**								
16:00-16:20			**Costal fisheries (3)**	Geographic Information Systems in Coastal and Marine Research and Management	**CLAUS**	Belgium	78	182			
16:20-16:40				Fine Scale Assessment of small vessel fisheries: application of GIS to spatial performance measures	**MUNDY**	Australia	79	139			
16:40-17:00				A GIS model for management purposes in the costal areas of Sardinia (Central Mediterranean)	**MURENU**	Italy	80	181			

August 29 (Friday) : Plenary at the Auditorium

Time	Presentation method	Agenda	Subject	papers	Presenter	Country	Page (abstract)	Reg. no	Moderator	time keeper	MIC distributor
8AM-5PM	Registration (Room 104)										
09:00-09:20	Oral presentation	Habitats (11)	Marine (7)	Large pelagic fisheries and climate variability: a comparative analysis of the spatio- temporal patterns in the Tropical Indian, Atlantic and Pacific Oceans	CORBINEAU	France	85	143	GEITNER (140, Denmark)	MAFRA (154)	FREITAS (112) and MICELI (157)
09:20-09:40				3 d pelagic habitat mapping in the Baltic Sea	GEITNER	Denmark	86-87	140			
09:40-10:00				Distribution of bigeye tuna (*Thunnus obesus*) in relation to variability of net primary production in the Pacific Ocean	CAI	Taiwan	88-89	177			
10:00-10:20				Fishery Oceanography of Bigeye and Yellowfin Tunas in Pacific Kiribati Waters	NI	Taiwan	90	178			
10:20-10:40				Spatial analysis of Isada Krill (*Euphausia pacifica*) distribution in frontal environments in the North Pacific Ocean	TOJO	Japan	91	127			
10:40-11:00				tea break [helpers : MELLO(114) and SILVESTRI (149)							
11:00-11:20				Using GIS and remote sensing techniques to compare spatial distributions and habitat use of single fish versus fish schools in a coastal upwelling system	REESE	USA	92	156	FLITCOFT (135, USA)		
11:20-11:40				The Bottomfish GIS: a Tool Developed to Review and Modify Restricted Fishing Areas in the Main Hawaiian Islands	O'CONNER	USA	93	109			
11:40-12:00			Fresh water (3)	Modelling sea turtle nesting habitat potential for Rio de Janeiro state in a GIS using multi-criteria analysis	D. SOUZA	Brazil	94	159			
12:00-12:20				Assessing patterns of juvenile coho salmon (*Oncorhynchus kisutch*) occupancy: A stream network perspective	FLITCROFT	USA	95	135			
12:20-12:40				Using GIS to determine fish species distribution and composition in the Upper Rio Grande Basin, USA	CALAMUSSO	USA	97	189			
12:40-14:00	Lunch										
14:00-16:00	Panel discussion	(Sum-up Session) The objectives of this Session are to highlight progress being made and to discuss ways to move forward. Each panelist will summarize trends in his subject area and there will be discussion from the floor that will help demonstrate where fishery GIS/spatial analyses should now be going. Progress of following three themes and two important areas presented and discussed during the Symposium is especially emphasized, i.e., (1) GIS systems, (2) Ecosystem Approach to Aquaculture (EAA), (3) Ecosystem Approach to Fisheries (EAF), (4) Management(MPA and other areas) and (5) Future GIS. Each subject plans to be completed in 20 minutes including presentations and discussions with the floor (10minutes for presentations and 10 minutes for discussions are ideal and suggested). Detail framework of this Session will be announced at the beginning of this Session from the Chair.							Chair : Meaden (126) Chief Rapporteur : Mundy (139)		
16:00-16:20	closings	Last remarks and the future			NISHIDA (118) (Convener)						
		Farewell speech			SCOTT (121) (local organizer)						

Five areas	Panelist	Rapporteur
(1) GIS systems	WOOD (183)	SELLARS(145)
(2) Ecosystem Approach to Aquaculture (EAA)	KAPETSKY (125)	AGUILAR -MANJARREZ (124)
(3) Ecosystem Approach to Fisheries (EAF)	CAROCCI (123)	KLEISNER (191)
(4) Managements	HAYNIE (155)	MURFITT(144)
(5) Future GIS	FISHER (108)	STELZEN-MÜLLER (111)
(6) General (overall) comments	MEADEN (Chair, 126)	MUNDY (139)

Each rapporteur is requested to send the report of the assigned panel to the Chief rapporteur by September 5 (Fri). Then the Chief rapporteur is requested to edit all the reports and send to the Secretariat by September 12(Fri). The report of the panel discussion will be in the 4th Proceedings ***[GIS/Spatial analyses in Fishery and Aquatic Sciences (Vol. 4)].***

Area	Reg. no.	Title of the poster (16)	Presenter	Page (abstract)
Systems (2)	167	Development of a towed high resolution optical and acoustic imaging system for scallop (*Placopecten magellanicus*) Assessment and Ecosystem-Based Management	**TAYLOR**	101
	160	GeoPesca – a website proposal for the dissemination of geo-referenced information on the Portuguese trawl fisheries	**PINTO**	102-103
Site selection (1)	157	Selection of potential areas for marine reserves network supported by Geographic Information Systems: A large-scale case study from Southwest-South Region of Brazil	**MICELI**	104-105
Aquaculture (4)	149	The use of the SIG in the aquaculture mapping and research of the Cocanha Island, São Paulo State, Brazil	**SILVESTR**	106-107
	105	Cross-section of fish-breeding and fee-fishing systems in the state of Rio de Janeiro, Brazil	**MACEDO**	108
	166	Climate Change and Aquaculture in Hordaland, Norway	**ANTONIJEVIC**	109
	112	Integrated coastal zone management: use of Geographical Information Systems as a tool for characterization of sea shrimp farm areas in southern Brazil	**FREITAS**	110
Ecosystem (1)	127	Marine environment induced spatial interaction of recruited walleye pollock juveniles (*Theragra chalcogramma*) with prey, predator, and marine environment variables in Pacific coast of Hokkaido, Japan	**TOJO**	111
Management (5)	175	Fisheries catch effort study using MODIS data and non-parametric additive regression models in the ATSW area	**PALENZUELA**	112
	181	Usefulness of VMS to define trawlable areas: a case spatial analysis in the Central Mediterranean	**ORTU**	113
	195	Using GIS in the description of the spatial-temporal dynamic of an artisanal fishery around a Mediterranean Marine Protected Area	**ALMARCHA**	114
	150	Analysis of the relationship between the environmental parameters and the pirarucu (*Arapaima gigas*, Cuvier, 1819) abundance in Mamirauá Sustainable Development Reserve várzea lakes: a multi sensor approach to the community-based fishing management	**AFFONSO**	115
	175	Study of harmful algal events in the ria of Vigo (NW Spain) using geographical information systems and remote sensing techniques	**PALENZUELA**	116
Habitat (3)	170	How do climatic patterns affect fisheries resources? A case study from the Greek fisheries *(canceled?)*	**someone for KATARA**	117
	174	Spatial distribution characteristics of skipjack tuna schools in Western Central Pacific Ocean in association with ENSO	**HSIEH**	118-119
	123	Reef habitat area of the endangered Napoleon fish, Cheilinus undulatus (CITES Appendix II), estimated using remote sensing and GIS	**CAROCCI**	120

Subject	Reg. no.	Title of PC demo (12 by10 presenters)	Presenter	Page (abstract)
Information System and software (7)	119	14 years of Marine Explorer (ME) (Marine GIS) development and introduction to case studies mitigating high fuel price problem using the ME	ITOH	123
	160	ICES EcoSystemData – Visualising data for the ecosystem approach	PINTO	124-125
		GeoPesca – a website proposal for the dissemination of geo-referenced information on the Portuguese trawl fisheries		126-127
	124	Global Gateway to Geographic Information Systems (GIS), Remote Sensing and Mapping for Aquaculture and Inland Fisheries	AGUILAR-MANJARREZ	128
	153	Information System for the Request of Exploitation Permits for Aquaculture in Federal Water Bodies in Brazil – SINAU	ANDRADE	129
	139	Eonfusion: closely coupled visualization and analysis software for 4D fishery and aquatic data	MUNDY	130
	166	Climate Change and Aquaculture in Hordaland, Norway	ANTONIJEVIC	131
Monitoring system (5)	167	Development of a towed high resolution optical and acoustic imaging system for scallop (*Placopecten magellanicus*) Assessment and Ecosystem-Based Management	TAYLOR	132
	169	Dynamic Maps for Fishing Monitoring	LESSA	133
	183	NICAMS: a spatially enabled image analysis tool for photographic transect surveys.	WOOD	134
		A robust, low cost, spatially enabled, semi-automatic fishery survey data capture system and GIS.		135
	175	Using GIS methods to study the spatial and temporal distribution of commercial fisheries efforts for the Galician fleet in the ATSW area	PALENZUELA	74-75

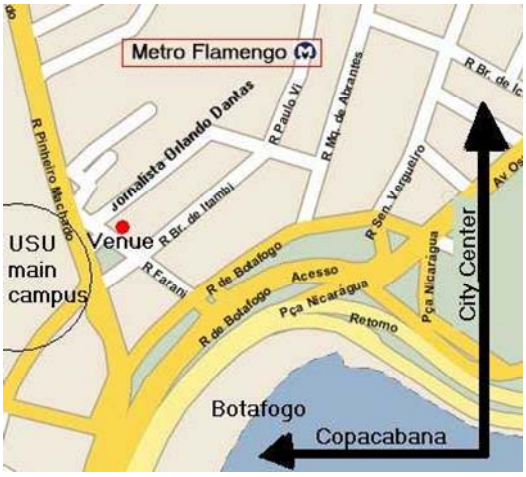
[MAP OF RIO INDICATING, THE AIRPORT, THE VENUE & 4 HOTELS]

HOW TO GET YOUR HOTEL IN COPACABANA FROM THE AIR PORT?

The Rio de Janeiro 'Tom Jobim International airport', AKA Galeão (GIG) is in Guanabara Bay. It is about 20 minutes by car to Copacabana. Transport options to Copacabana from the air port are as below:

1. Blue or white air-conditioning cabs - about 65 R$ (US$40).
2. Yellow cab about 45$ (US$27)
3. Real Bus 6.50R$ (US$4)- leaves every half hour

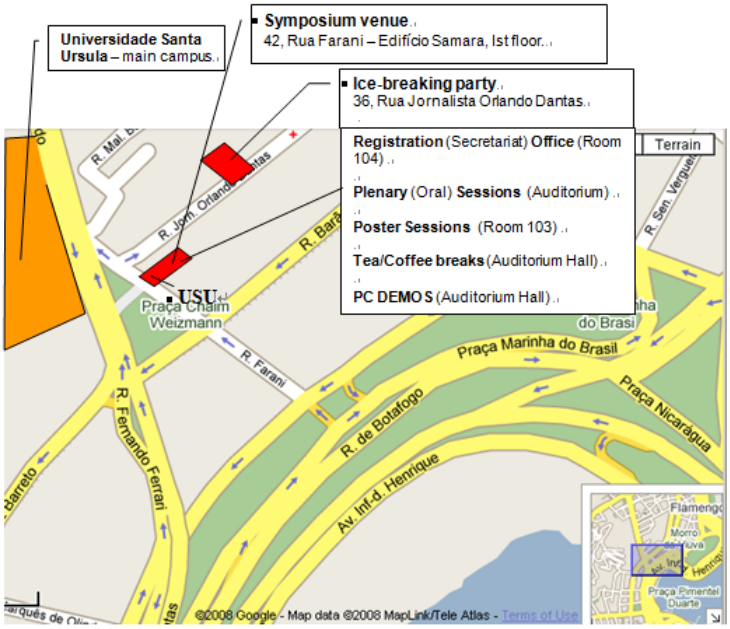
Tickets for the bus and for the blue/white cabs can be purchased immediately after passing customs gate, and before arriving at the main airport lobby.



HOW TO GET THE VENUE FRON YOUR HOTEL?

Universidade Santa Úrsula is closest to the Flamengo station of the metropolitan underground, only two stops away from the Copacabana beach. The hotels suggested by Metropol are all along Copacabana beach **(indicated in the left map with the red boxes)**

Important locations



Ice-breaking venue – 36, Rua Jornalista Orlando Dantas

Dinner

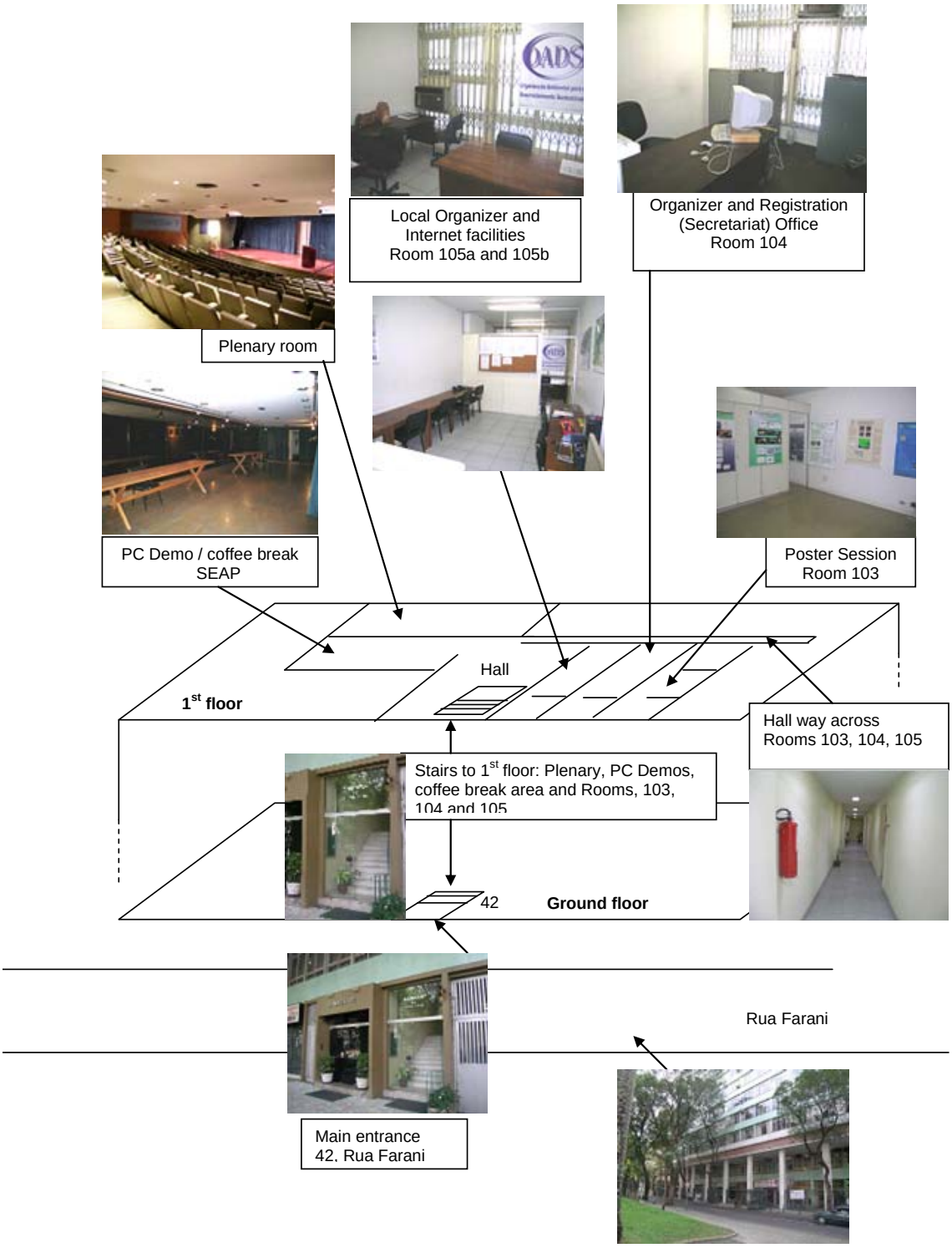
Rua Jornalista Orlando Dantas

Symposium Venue
42, Rua Farani, 1st floor

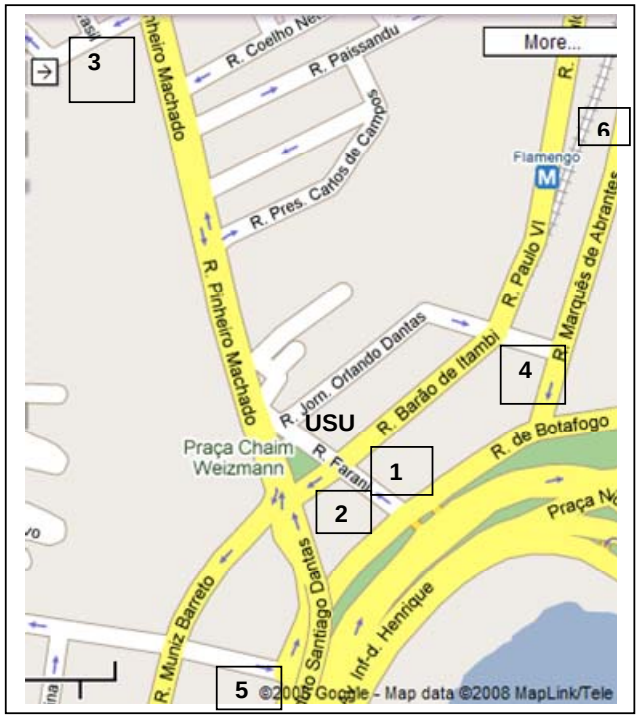
Rua Farani

Main entrance 42, Rua Farani

Insides of the symposium venue: University Auditorium



Restaurants in the Venue area vicinity

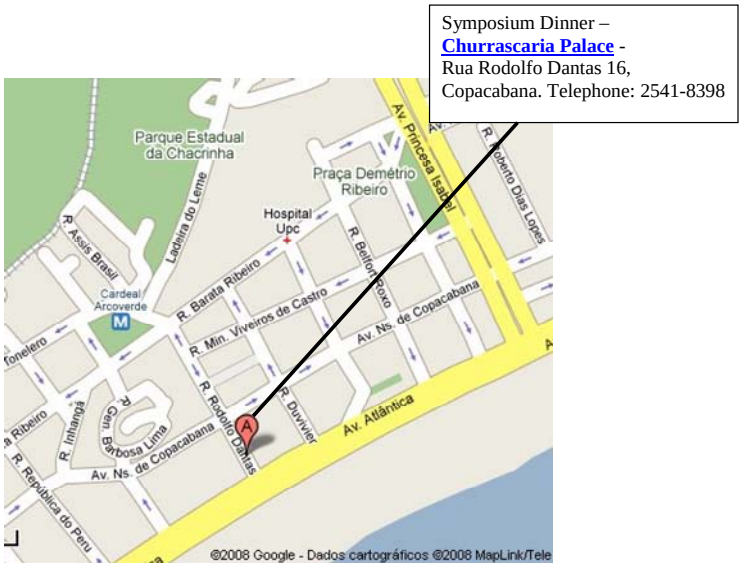


Area	Restaurants
1.	Miako, Mizu, Mr Leo, Casa da Sogra, Delicias
2.	La Mole, Scotton
3.	Fluminense Football Club
4.	Catarina´s Grill, Port's Self, Marques do Quilo
5.	Botafogo Praia Grill, Shopping Center Botafogo – Food plaza
6.	McDonald's

Restaurant	Walking distance in minutes	Accepts these credit cards			Approximate price in R$/kg (Buffet service)
		Amex	Mastercard	Visa	
Mizu	2	Yes	Yes	Yes	38,90
Miako	2	Yes	Yes	Yes	35,00
La Mole	2	Yes	Yes	Yes	19,00
Botafogo Praia Grill	10	Yes	Yes	Yes	30,00
Scotton	2	No	Yes	Yes	22,00
Catarina's Grill	10	Yes	Yes	Yes	23,00
Marques do Quilo	8	No	Yes	Yes	21,00
Port's Self	8	-	-	-	19,00
Via Farani	2	Yes	Yes	Yes	43,00
Casa da Sogra	2	No	Yes	Yes	13,00
Delicias à Mesa*	2	-	Yes	Yes	14,00

* Serves breakfast from 07:30 on

Location of the symposium dinner (Aug. 27, Wed. 7:30PM-)



General situation map can be observed at the Google Maps (maps.google.com)
<http://maps.google.com/maps/ms?hl=pt-BR&ie=UTF8&msa=0&msid=104929039607251031136.00045395d0eb3f63dfb44&ll=-22.940017,-43.180046&spn=0.003735,0.006909&z=17>

Various separate site maps are available in this program booklet.

PROFILE OF THE KEY NOTE SPEAKERS

Listed by the order of the presentation

WILLIAM L. FISHER

William L. Fisher is a Research Ecologist and the Assistant Leader of the USGS, Oklahoma Cooperative Fish and Wildlife Research Unit and an Adjunct Professor at Oklahoma State University where he has been since 1991. He received his MA from DePauw University and BA and PhD in biology from the University of Louisville.

He worked as an fisheries and aquatic biologist for state and federal agencies and universities after completing his graduate degrees. His research interests are in fisheries science, stream ecology, and GIS applications in natural resources, and he teaches graduate courses in these areas. He has authored or co-authored 70 peer-reviewed articles in scientific journals and book chapters, and he is the co-editor an American Fisheries Society (AFS) book titled *Geographic Information Systems in Fisheries*. He has advised 17 M.S. and 3 Ph.D. students.

Dr. Fisher and his students have presented their research findings at over 200 state, regional, national and international scientific meetings and conferences. He has been a member of the AFS since 1980 and actively involved in Society leadership and service. He was president of the Alabama Chapter and the Southern Division, Associate Editor of *Transactions of the American Fisheries Society* and Science Editor of *Fisheries*, and has chaired and served on many AFS committees.

He is the current President of the AFS Computer User Section and Second Vice President of the AFS. After 17 years at the Oklahoma Coop Unit, Bill will be leaving this Oklahoma this fall to become the Leader of the New Cooperative Fish and Wildlife Research Unit at Cornell University.

LINDSAY G ROSS

Professor of Aquatic Physiology
Head of the GIS group at the Institute of Aquaculture, Stirling, UK.
Dean of the Faculty of Natural Sciences 1997 - 2003
Member of the Scottish Deans of Science and Engineering Committee.
Professor Ross is a co-editor of the key Wiley-Blackwell journal **Aquaculture Research**
Professor Ross has over 30 years of experience in aquaculture. Current research interests are based on:

- Geographic Information Systems and Remote sensing for Aquaculture Planning and Management.
- Investigation of indigenous species for Aquaculture development in Central and South America.
- Metabolic and energetic studies in warm water cultured fish and shrimp; physiology of cultured animals, including tilapias, carps, salmonids and crustaceans, tropical and temperate, at the whole animal level.

He has been involved in development work and consultancy in a number of countries and is currently managing long-term projects aimed at exploitation of indigenous species for aquaculture in Mexico. He has published almost 300 articles in his various fields of interest.

JAMES MCDAID KAPETSKY

Ph.D. Fisheries The University of Michigan

25 years with the FAO/UN Fisheries and Aquaculture Department first in Colombia (1974-78) as a fishery biologist then at FAO HQ in Rome as a fishery resources officer and senior fishery officer (1979-1999).

In 1999 founder of Consultants in Fisheries and Aquaculture Sciences and Technologies (C-FAST, Inc.) collaborating with FAO and other international organizations up to the present. Experience with remote sensing for fisheries began in 1983 and with GIS for aquaculture in 1986.

Active in promoting the use of GIS, remote sensing and mapping to address issues in inland fisheries and aquaculture lately via GISFish. Author and co-author of several book chapters, journal articles and technical papers. Main current interest is in GIS and RS approaches for estimating the potential for open ocean aquaculture.

JOSÉ AGUILAR-MANJARREZ (note: most people known me as Pepe Aguilar)

Dr. José Aguilar-Manjarrez brings with him many years of experience on aquaculture planning and management using Geographic Information Systems (GIS). His experience with GIS began with the use of GIS for aquaculture site selection in Tabasco State, Mexico as the basis of his MSc dissertation from 1991 to 1992 at the Institute of Aquaculture (IOA) in Scotland. He then carried out a Ph.D. dissertation from 1992 to 1996 at the IOA by developing GIS based models for planning and management of coastal aquaculture in Sinaloa State, Mexico.

From 1996 to 1998, he worked at the Aquaculture Management and Conservation Service (FIMA) of the FAO Fisheries and Aquaculture Department as a visiting scientist with focus on the use of GIS for potential for estimating fish farming potential in Africa, and later as a consultant on spatial modeling for inland fishery potential. From November 1998 to July 2001, he worked as an Information Systems Officer at the Knowledge and Communication Department of FAO, designing and developing FAO's GIS map repository and carrying out a GIS study to assess locations that have potential for the production of Barbara groundnut across the world.

Prior to joining FAO-FIMA, from 1990 to 1991 he worked in Mexico City as an aquaculture consultant at a private consulting company with focus on environmental impact studies of navigation ports and shrimp farming site selection for the states of Sinaloa, Chiapas and Veracruz. He then worked at the Bank of Mexico (FIRA), also as an aquaculture consultant developing feasibility study reports for shrimp farming in Sinaloa.

Dr. Aguilar was appointed Fishery Resources Officer at FIMA in Rome, effective 1 August 2001. His responsibilities at FAO-FIMA from 2001 to date broadly include: (a) the development of methodologies, technical guidelines and technical papers, reviews and training materials on GIS applications to aquaculture and inland fisheries; (b) the development of applications of geo-referenced information systems like GISFish; (c) the formulation, implementation and review of field projects that have a GIS and/or remote sensing component; and (d) the build-up of synergies in the applications of new technologies, such as GIS and Remote Sensing related to aquatic resource management.

At present, Dr. Aguilar's activities at FIMA include: (a) improvement and expansion of the GISFish portal; (b) a review on GIS, Remote Sensing and Mapping in Support of the Ecosystem Approach to Aquaculture: Status and Future Initiatives; (c) a reconnaissance study to assess the potential for Open Ocean Aquaculture in Exclusive Economic Zones from global and national perspectives; and (d) assistance to field projects that have a GIS related component.

FABIO CAROCCI

Fabio Carocci, an Italian national, joined FAO in 1993 as Research Assistant in the Marine Resource Services of the Fisheries Department of the Food and Agriculture Organization (FAO). Graduated in geological science, he has been engaged in the computer science applied to geography and cartography and for the last 15 years covering the development of GIS and remote sensing activities for the Fisheries Department. In the last 10 years he has been providing technical support to several projects with GIS activities in support to fisheries management at national and regional levels in different areas of the world. He has gained experience with training activities, ranging from postgraduate students to fisheries managers. He is involved in the development of paper-based training materials, as well as in applying multimedia technology. In the last decade he has been also involved in the analysis of the spatial correlation between fishery resources and fishing activities. His current main focus is on the development of principles and guidelines for the application of GIS in Ecosystem Approach to Fisheries.

GEOFF MEADEN

Geoff has just retired from his post as Principal Lecturer in Geography at Canterbury Christ Church University in the UK. Since he started full time work in 1957 he feels that it is time to put his feet up and he looks forward to being slightly less busy in the future. Geoff completed a first degree and Masters degree at London University, and his 1978 dissertation for his Masters was on the "Changing location of catfish farming on the Mississippi Delta".

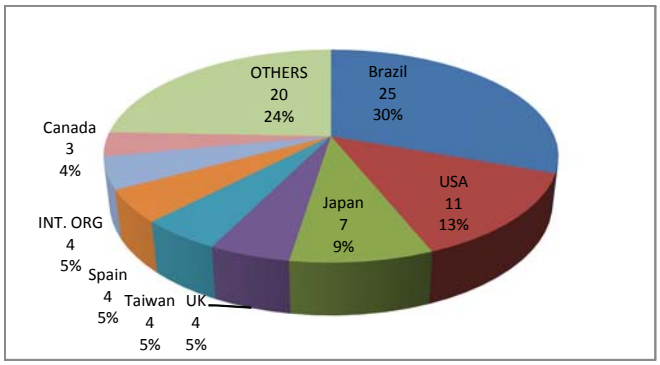
It would now be very interesting to do a 30 year follow-up study of this topic. His PhD was on seeking "Optimum locations for freshwater fish farms in England and Wales". The fact that one of the other keynote speakers (James Kapetsky) read the outputs from this thesis lead Geoff to doing a number of assignments for the Food and Agriculture Organisation of the UN, and he is still doing assignments for them today.

At his University Geoff has run a 'Fisheries GIS Unit' for the past 12 years - he thinks that it may be the only such Unit in the world. This Unit has done a large number of small research projects and you will hear the results of the latest project (called CHARM 2) given at this meeting.

Geoff gave the first keynote speech at the First Fisheries GIS Symposium in this series, held in Seattle (USA) in 1999. He helped organise the 2nd Symposium in Brighton, UK in 2002, but in 2005 he sent his research assistant along to the 3rd Symposium in Shanghai, China. He is now very pleased to again be joining up with past colleagues at this Symposium. He has just been told that if you go to 'Google - Scholar' on your computer and type in "Fisheries GIS" he is given as the leading author in this field. He will now be more than happy to pass this task on to someone else !

LIST OF PARTICIPANTS (as of Aug. 16, 2008)

Country	number
Brazil	25
USA	11
Japan	7
UK	4
Taiwan	4
Spain	4
INT. ORG	4
Canada	3
OTHERS	20
Total	82



Total

Country or Int. Oraganization	number
Australia	1
Belgium	1
Brazil	25
Canada	3
Denmark	1
France	2
INT ORG (FAO)	2
INT ORG(ICES)	1
INT ORG(WorldFish)	1
Iran	1
Italy	1
Japan	7
Kenya	1
Mexico	1
New Zealand	2
Nigeria	1
Norway	2
Oman	1
Philippines	1
Sénégal	1
Spain	4
Taiwan	4
UAE	2
Uganda	1
UK	4
USA	11
26 (3 int org & 24 countries)	82

Last name	First name	Reg. No.	Agency / Institute	Post	Country ( ) int. org.	e-mail address
【A】						
ABBA	Abdullah	168	AquaGric Ltd.	Managing Consultant	Nigeria	abba@consultant.com
AFFONSO	Adriana	150	Instituto Nacional de Pesquisas Espaciais	Phd student	Brazil	affonso@dsr.inpe.br
AGUILAR	Glenn	172	University of the Philippines Visayas, College of Fisheries and Ocean Sciences, Institute of Martine Fisheries and Oceanology	Chancellor and Professor	Philippines	gdaguilar@upv.edu.ph; gdaglr@gmail.com
AGUILAR-MANJARREZ	José	124	Food and Agriculture Organization of the United Nations (FAO)	Fishery Resources Officer	FAO (Italy)	Jose.AguilarManjarrez@fao.org
ALKHARUSI	Lubna	187	Ministry of Fisheries Wealth Oman	Assistant Director of Marine Science and Fisheries Wealth	Oman	lubnakharusi@hotmail.com
ANDRADE	Flavio	153	Secretaria Especial de Aqü icultura e Pesca da Presidência da República – SEAP/PR	GIS Technical Adviser	Brazil	flaviosimas@seap.gov.br
ANTONIJEVIC	Virginia	166	Institute of Geography, Faculty of Social Sciences, University of Bergen (Norway).	Research Assistant	Norway	virginia.antonijevic@geog.uib.no
【B】						
BAHARNA	Reem	197	Biodiversity Management - Marine Center, Environment Agency - Abu Dhabi	Deputy Manager, Fisheries	UAE	rjaafar@ead.ae
BAKELAAR	Carolyn	117	Fisheries & Oceans Canada	GIS Analyst	Canada	carolyn.bakelaar@dfo-mpo.gc.ca
BARROSO	Gilberto	165	Federal University of Espírito Santo, Brazil	Adjunct Professor	Brazil	gfbarroso@gmail.com
BECKER	Alexandre	202	Instituto GIA	Biólogo, Mestre em Produção Animal	Brazil	alexandre@gia.org.br
BENTZ	Cristina	176	CENPES/PDEDS/AMA	GEOFÍSICO PLENO - CONSULTORA SENIOR	Brazil	cris@petrobras.com.br
BERS	Anna	151	Laboratório de Manejo, Ecologia e Conservação Marinha, Departamento de Oceanografia Biológica, Instituto Oceanográ fico, Universidade de São Paulo	Postdoctoral Researcher	Brazil	valeria_bers@hotmail.com
BEZERRA	Thales	200	Universidade Federal Rural de Pernambuco - UFRPE	Msc Student	Brazil	thales_ramon@hotmail.com
BONETTI	Jarbas	142	Federal University of Santa Catarina	Associate Professor, PhD	Brazil	bonetti@cfh.ufsc.br
BRAKEL	Martin	137	WorldFish Center	Fisheries Scientist, Aquatic ecosystems and fisheries, CGIAR Challenge Program on Water and Food	WorldFish Center (Malaysia)	m.vanbrakel@cgiar.org
BREEN	Patricia	141	Queens University Belfast	Postgraduate Student	UK	pbreen05@qub.ac.uk

【C】						
CAI	Yi-Hui	178	Department of Environmental Biology and Fisheries Science, College of Ocean Science and Resource, National Taiwan Ocean University	PhD student	Taiwan	niih@mail.ntou.edu.tw
CALAMUSSO	Bob	189	Tonto National Forest, US Forest Service, USDA	Forest Fish Biologist	USA	Rcalamusso@fs.fed.us
CÃMARA DE MELO VIANA	Graco	198	Universidade Federal do Rio Grande do Norte	Professor Adjunto; Doutorado; Vice-Diretor do Centro de Biociências da UFRN	Brazil	robalo@ufrnet.br
CAROCCI	Fabio	123	Food and Agriculture Organization (FAO) of the U.N.	Research Assistant	FAO (Italy)	fabio.carocci@fao.org
CLAUS	Simon	182	Flanders Marine Institute	Coordination Manager Belgian Network for Coastal Research	Belgium	simon.claus@vliz.be
CORBINEAU	Ana	143	Institut de Recherche pour le de'veloppement (IRD)	PhD student	France	ana.corbineau@ird.fr ; ana.corbineau@ifremer.fr
【D】						
DUQUE ESTRADA	Tiago	152	Instituto Costa Brasilis	Associate	Brazil	tiago@costabrasilis.org.br
【F】						
FERRANDIS	Eduardo	190	University of Alicante – Spain Dep. of Marine Sciences and Applied Biology	Director of the Department	Spain	Eduardo.ferrandis@ua.es
FISHER	William	108	USGS, Oklahoma Cooperative Fish and Wildlife Research Unit	Research Ecologist and Adjunct Professor	USA	wfisher@okstate.edu
FLITCROFT	Rebecca	135	United States Department of Agriculture Forest Service	USDA Forest Service Research Station, Corvallis Oregon Fish Research Ecologist	USA	becky.flitcroft@oregonstate.edu
FORCADA	Aitor	195	Departamento de Ciencias del Mar y Biología Aplicada. Universidad de Alicante	Researcher	Spain	forcada@ua.es
FREITAS	Rodrigo	112	Fundação Universidade Federal do Rio Grande - FURG/ Brazil	Doctorate Student	Brazil	rodrigorandow@ig.com.brrodrigorandow@hotmail.com
【G】						
GEITNER	Kerstin	140	DTU Aqua, Technical University of Denmark, National Institute of Aquatic Resources	GIS coordinator	Denmark	kjg@aqua.dtu.dk
GRAS	Michael	132	IRD (Institut de Recherche pour le Développement)	Fisheries Scientist, GIS specialist	Sénégal	michael.gras@ird.sn
GREGOLIN	Altemir	192	Ministry of Fisheries	Fisheries Minister	Brazil	
【H】						
HARSCOAT	Valérie	133	IFREMER	Project manager in Information System development, IDM/ISI	France	Valerie.Harscoat@ifremer.fr
HARTMANN	Stanley	194	Environment Agency – Abu Dhabi	Fisheries Statistician	UAE	shartmann@ead.ae
HAYNIE	Alan	155	NOAA Fisheries, Alaska Fisheries Science Center	Economist	USA	Alan.Haynie@noaa.gov
HSIEH	Chia-Hua	174	Department of Environmental Biology and Fisheries Science, National Taiwan Ocean University	Student in graduate school	Taiwan	M96310008@ntou.edu.tw

ITOH	Kiyoshi	119	Environmental Simulation Laboratory and International Fishery GIS Society	President	Japan	itoh@esl.co.jp
【J】						
JIMENEZ	Lourdes	180	Universidad Veracruzana, Centro de Ecología y Pesquerías	Investigador Titular C	Mexico	loujim@gmail.com ljimenez@uv.mx
【K】						
KAPETSKY	James	125	Fisheries and Aquaculture Sciences and Technologies (C-FAST, Inc.)	Consultant	USA	cfastinc@bellsouth.net and cfast@sigmaxi.net
KLEISNER	Kristin	191	University of Miami, Rosenstiel School of Marine and Atmospheric Science	Postdoctoral Research Assistant	USA	kkleisner@rsmas.miami.edu
KOBARA	Shinichi	116	Texas A&M University	Ph.D Student	USA	shinichi@tamu.edu
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A few notes for the novice traveller in Rio...

Taxis...
there are always a few crooks around...
Yellow taxis are ok, and should cost between 15-29 reais from Copacabana to the university..
If you use this option, choose a yellow cab which has on it side, a coop identification.
If you are worried, take note of the coop, and the taxi coop number (not the license plate).
In case of trouble, you can call the tourist police and complain.

Shiny !
Some people complain about being mugged on the beachfront... I 've heard of a few cases... and seen one or two, so my advice is...
Many times it involves a person with a real 'touristy' look, which may include several shiny and obviously potentially valuables including gold chains, fancy watches, loose cameras and large rings...
Some tourists have found that a whistle, hanging around the neck, is a good deterrent...
In case of emergency, you can whistle to call attention.
It actually sounds like a police whistle, which makes it even more effective.

in and around Rio...
There are several fantastic programs
I always suggest the Botanical Garden, Corcovado and of course Sugar Loaf...

Corcovado should be done at the earliest hour you can get there, before noon... Otherwise, for pictures, you get the sun on Christ's back as it drops in the horizon... The tram costs about 35 reais... not cheap, but worth it...

Sugar Loaf is best in the late afternoon, where you can see the sun set, and have a proper caipirinha as you see the city night lights come up in Rio...Take a wind breaker, or jacket.. It can get cool up there!

Rainforest...
If you want to see a good rainforest and trek throught it, maybe even spend a night out there (in total comfort) check out with Rainer Dungs...see his brochure attached - his email is copied - Rainer Dungs <rdungs@yahoo.com>

Scuba/snorkel
This is 'our winter' and weather may be a bit rough and waters murky - for those who are interested in Ilha Grande, check out with Roberto Bormann, he may have a schooner/scuba/skin diving opportunity starting off at Pousada Bromélias in Angra dos Reis.... Roberto Saliveros Bormann <rsbormann@hotmail.com>

Rio Botanical Tour...
If you like to walk around town with a local botanist who can point out the trees and tell you their origin and peculiarities, it would be a day long walk with Edith Brechtchold - Edith Brechtold <edithbrechtold@hotmail.com>

Samba
Of course...that can be done comfortably in an amiable atmosphere in historical downtown Rio, on Tues, Thurs or Friday at the RioScenarium - an antique 3-story house turned into musical house. My bet is Tues or Thurs, as Friday it is always packed...

Eating around the university during the symposium...
There are many places and prices ranges...
Look at the attached doc file, and talk with our local organizing office.
We can probably send a helper to guide a group to your choice restaurant...
Best seafood at Real Astoria... need a cab to get there. Pricey but what a view....!

Restaurants in general....
see the below copy-pasted...and good luck !

RESTAURANTS

Eating out in Rio de Janeiro is a pleasure. Typically, Carioca's do not fancy too spicy food, and most restaurants have adapted their menus accordingly. Even Mexican and Indian restaurants!

Good to know:

- It is not customary, in any restaurant in Brazil, to serve the traditional iced water with the menu, unless it is asked for (and paid). (Don't ask for it!)

- It is strongly recommended to drink only bottled mineral water anywhere in Brazil.

- Ice cubes in drinks normally are made of filtered water, and can be accepted, but….

- Most restaurants do serve the traditional Brazilian coffee (very small cups of strong coffee) as complimentary, after the meal. Espresso coffee, etc. is charged for. It is not customary in Brazil to drink coffee with the dessert, so if you want that, make sure the waiter understands, else….

- In many restaurants the waiter will bring what is called a "couvert" to your table, together with the menu card. In some places it is nothing more then a small basket with toast or bread, in other places, a real treat! Everywhere it is charged for, per person!

- If you intend to pay with credit card, ALWAYS ask first if it is possible. In many of the very best restaurants all over Brazil, credit cards are not accepted!

- Several of Rio's traditional steakhouses; "Churrascarias" have started to offer a cocktail upon seating at the table. These drinks are delicious but costly and by no means complimentary, as it might seem, when offered.