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**20 October 2009**

**Notification of Proposed Assessment Team for the lobster fishery (*Homarus gammarus*) in Granville Bay and associated Basse Normandie and Jersey territorial waters by fishermen from Basse Normandie (West and North Contentin) and Jersey**

MacAlister Elliott and Partners Ltd. (MEP) is undertaking the full MSC certification assessment process for the following fishery:

European lobster (*Homarus gammarus*)fishery from the North and West Cotentin (Basse Normandie, France), Jersey (UK Crown Dependency) and Granville Bay (shared fishery between Basse Normandie and Jersey) stock.

To undertake the assessment process, MEP proposes the following team of experts:

- Dr Jo Gascoigne
- Jean-Claude Brêthes
- Dr Sophie des Clers

The CV of each team member is available below or on request to MEP.

All interested stakeholders are encouraged to contact Dr Jo Gascoigne at the contact details above or at [j.gascoigne@orange.fr](mailto:j.gascoigne@orange.fr) or Caroline Gregg at MEP.

The deadline for consultations is 10 November 2009.

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J D M ELLIOTT S J AKESTER  
T E SCHLESINGER BSc (Hons) FCA



REGISTERED NUMBER 13 17 44 9  
VAT REGISTRATION NUMBER 293 6198 20

<b>Family Name:</b>	<b>Gascoigne</b>
<b>First Names:</b>	<b>Joanna</b>
<b>Date of Birth:</b>	<b>4<sup>th</sup> May 1971</b>
<b>Nationality:</b>	<b>British</b>
<b>Position:</b>	Expert in marine ecology and conservation, fisheries and shellfish culture; Technical Director for seafood eco-certification, MacAlister Elliott and Partners; Honorary Research Fellow, School of Ocean Sciences, University of Wales Bangor
<b>Key skills:</b>	Fisheries and aquaculture sustainability and policy; marine ecology and conservation biology; marine protected areas; marine environmental impact assessment; shellfish culture; fishing techniques and practices.
<b>Languages:</b>	English (native), French (fluent), Spanish (fluent reading, medium spoken)

## **Professional Experience Record (most recent first)**

### **2007 – date:**

#### **Expert in marine ecology, fisheries and shellfish culture. Ongoing projects include:**

- Report on policy hurdles and tools to support EU fisheries in moving towards low-carbon, low-impact practices (Seas at Risk).
- Review of the Omani lobster fisheries with a view to improving management practices and economic output per lobster (MacAlister Elliott and Partners, Five Oceans LLC).
- Marine Stewardship Council (MSC) pre-assessment for numerous fisheries, including demersal fish, large and small pelagics, highly migratory species, molluscs, crustaceans, freshwater fish; locations including France, UK, Spain, South Africa, Indian Ocean, Southern Ocean, transboundary (various clients, MacAlister Elliott and Partners)
- MSC full assessments – expert and project manager: two French and one UK saithe fisheries, the largest UK bottom mussel fishery, lobster fishery under French-Jersey co-management, French Southern Ocean toothfish fishery.

#### **Completed projects include:**

- Quantitative survey of fisheries in the Thames estuary (MacAlister Elliott and Partners)
- Review of fisheries impacts of oil spill, Côte d'Ivoire (Homarus Ltd.)
- Literature review of marine ecology at proposed breakwater sites, Yemen (Five Oceans LLC)
- Accessibility of marine environmental data in France (EU, Marine Resources Assessment Group, 2008)
- Review of techniques for assessing catch weight on board EU fishing boats (interviews with French, Belgian and Dutch vessel owners, producer organisations and fisheries managers) (EU, Marine Resources Assessment Group, 2008)

- Review of oceanographic and marine data availability in France, with analysis of data policies of main data holders (EU, Marine Resources Assessment Group, 2008)
- Marine benthic component of the Best Practical Environmental Option report for disposal of the wreck of the Napoli (Homarus Ltd, 2008)
- MSC full assessment of yellow mullet fishery in the Parc National Banc d'Arguin, Mauritania (one of Africa's largest marine protected areas); a case study for a new eco-certification methodology for data deficient fisheries (MacAlister Elliott and Partners, 2007-8)
- Review of best practice for ecotourism development in sensitive coral reef environments (Five Oceans LLC, Oman, 2007)
- Developing a management and monitoring programme for a marine protected area, Oman (Environment Society of Oman, 2007)
- Sustainability and carrying capacity of bottom mussel culture, Ireland (Bord Iascaigh Mhara, Poseidon Aquatic Resources, 2007)
- Incorporating aquaculture into the framework of ecosystem fisheries management (EU, Poseidon Aquatic Resources, 2007)
- Conflicts between dredging and shellfish culture in Poole Harbour (Homarus Ltd, 2007).
- EU fisheries policy and recruitment (Homarus Ltd, 2007).
- Review of fisheries activity in the Bay of Cadiz, Morocco and the Canary Islands (MacAlister Elliott and Partners, 2007)
- Various short studies on the environmental impacts of cable and pipeline laying, shipping accidents and dumping at sea

**Also: Honorary Research Fellow at the School of Ocean Sciences, University of Wales Bangor. Research projects include:**

- Impact of mussel culture on plankton and sediment dynamics in the Menai Strait (see below; papers in preparation)
- Population dynamics and extinction risk at low density: Using population parameters to predict the probability of Allee effects, sustainability and extinction risk under exploitation, consequences of rarity for population dynamics in species with different types of mating system (collaborations with Franck Courchamp, Université Paris Sud and Ludek Berec, Institute of Entomology, Ceske Budejovice, Czech Republic).

**2003 – 2007: Postdoctoral Research Fellow / Research Lecturer, School of Ocean Sciences, University of Wales Bangor.**

Research projects:

- Carrying capacity of the Menai Strait for mussel culture (includes informal co-supervision of a PhD student). Combining the study of physical processes (net flow, turbulent mixing and sediment transport) and biological processes (chlorophyll concentration and depletion, mussel feeding behaviour, density dependence and self-organised patterning, interspecific competition between suspension feeders) to assess the carrying capacity of the system for shellfish culture in the Menai Strait. Collaborations developed with Johan van de Koppel (Netherlands Institute for Ecology), John Widdows (Plymouth Marine Lab), Andrew Folkard (Lancaster Univ.), Rom Lipcius (Virginia Institute of Marine Science) and the Countryside Council for Wales.
- The ecology of seed mussel beds: assessing the importance of ephemeral seed mussel settlement for vertebrate and invertebrate predator populations and the ecological consequences of partial harvesting of these beds by the mussel industry. Collaboration with the NW and N Wales Sea Fisheries Committee.

- Recovery of populations of scallops, sea fan and other benthic species in fisheries closed areas, Lyme Bay (NERC grant with two collaborators).

**Teaching:**

- M.Sc. Physical Oceanography, Marine Biology and Shellfish Biology: Module on the interaction of physical oceanography and biology (lectures, field trip and data analysis)
- M.Sc. Conservation and Resource Management: Population consequences of rarity, extinction risk (lectures)
- Undergraduate Marine Biology: Allee effects in fisheries (2<sup>nd</sup> year lectures), Invertebrate fisheries and management of artisanal fisheries (3<sup>rd</sup> year lectures).

**2002 – 2003: Teaching assistant, Virginia Institute of Marine Science, USA**

Teaching assistant to post-graduate core courses in statistics and experimental design, marine ecology and oceanography during final year of PhD. Gave lectures and ran practicals and Q&A sessions, gave tutorials, set and marked assignments and exams and helped students plan project field work.

**1995 – 1999: Marine biologist, MacAlister Elliott and Partners Ltd. UK**

Biologist in the environment department of a marine consultancy, involved in the following projects:

- Stock assessment and management of the Bahamian spiny lobster, queen conch and Nassau grouper fisheries (lead consultant). Bahamian Department of Fisheries and the Bahamas Reef Environment Education Foundation (BREEF).
- Community-driven design of a marine reserve network for central Andros Island, Bahamas (lead consultant). BREEF and a central Andros community group.
- Design of a fisheries development project, Eritrea (environmental specialist). Funded by FAO.
- Preliminary environmental impact assessment for container port development, Aden, Yemen (team leader). Funded by private sector.
- Planning and environmental impact assessment for harbour improvements, Cornwall (lead consultant). Collaboration with fishermen's group.
- Fisheries development, management and infrastructure provision, Yemen (UK project manager). Funded by World Bank and EU.

**1994 – 1995: Intern, European Commission, Brussels and Tanzania**

Unit for natural resources development projects for Eastern and Southern Africa. Bilingual working environment (English and French).

**Education**

**Ph.D. 1999 – 2003**

A theoretical and experiment study of Allee effects. A study on population dynamics, reproductive biology, sustainability of fisheries and extinction risk in marine populations, with specific focus on the queen conch *Strombus gigas*.

Marine Conservation Biology Group, Virginia Institute of Marine Science (VIMS), College of William and Mary, USA. Field work at the Caribbean Marine Research Centre, Bahamas, with extensive scientific diving. Also field assistant on project on physical-biological interactions in coral metabolism, involving saturation diving.

**M.Phil. 1994**

Ecological and economic impacts of forestry in the Flow Country, Scotland. Department of Geography, University of Cambridge, UK.

**M.A. 1990 – 1993**

Natural Sciences (Zoology and Ecology), Corpus Christi College, University of Cambridge, UK.

### **Grants, fellowships and awards**

- British Ecological Society Small Grant (£1200) for study of self-organisation in seagrass beds, with Andrew Folkard (Lancaster) and Rom Lipcius (VIMS), 2006
- Double Allee effects in the endangered island fox – successful postdoc application to French govt. with Franck Courchamp, 2003 (accepted post in Bangor instead)
- Zeigler Student Achievement Award, VIMS, 2003
- Winner, New Scientist / Wellcome Trust Millennium Essay Competition, 2002
- International Women's Fishing Association Ryan Kelley Memorial Scholarship, 2001
- International Society for Reef Studies PhD Fellowship, 2000
- Hargis Fellowship, VIMS, 2000
- Corpus Christi College Scholarship 1992-3

### **Field skills**

- Chief scientist on five research cruises on the *RV Prince Madog*.
- Experienced scientific diver (more than 300 dives including fish, benthos and habitat surveys). Training in saturation diving and two 7-day stays in the Aquarius underwater habitat. Nitrox certified.
- Experienced small boat operator.
- Experience of multiple marine field instruments and sampling techniques including towed and fixed camera gear, various fishing gears, coring, sidescan sonar, *in vivo* and *in vitro* fluorometry, ADCPs and CTDs.

### **Publications**

- Gascoigne J., Berec L., Gregory S. and Courchamp F. 2009. Dangerously few liaisons: a review of mate-finding Allee effects. *Population Ecology* 51(3), 355-365.
- Van de Koppel J., Gascoigne J., Theraulaz G., Rietkerk M., Mooij W.M. and Herman P.M.J. 2008. Experimental evidence for spatial self-organisation and its emergent effects in mussel bed ecosystems. *Science*, 322, 739-742.
- Courchamp F., Berec L. and Gascoigne J. 2008. Allee effects in ecology and conservation. Oxford University Press. Favourably reviewed in TREE and PLoS Biology. See <http://www.oup.com/uk/catalogue/?ci=9780198570301>.
- Gascoigne J., Beadman H.A., Saurel C. and Kaiser M.J. 2005. Density dependence, spatial scale and patterning in sessile biota. *Oecologia* 145, 371-381.
- Gascoigne J. and Lipcius R.N. 2005. Periodic dynamics in a two-stage Allee effect model are driven by tension between stage equilibria. *Theoretical Population Biology* 68, 237-241.
- Gascoigne J. and Lipcius R.N. 2004. Conserving populations at low abundance: delayed functional maturity and the Allee effect in reproductive behaviour of the queen conch *Strombus gigas*. *Marine Ecology Progress Series*, 284, 185-194.
- Gascoigne J. and Lipcius R.N. 2004. Allee effects driven by predation. *Journal of Applied Ecology*, 41, 801-810.
- Gascoigne J. and Lipcius R.N. 2004. Allee effects in marine systems. *Marine Ecology Progress Series* 269, 49-59.
- Krvtsov V., Gascoigne J. and Jones S.E. 2008. Harmonic analysis of suspended particulate matter in the Menai Strait (UK). *Ecological Modelling* 212, 53-67.
- Rippeth T.P., Gascoigne J., Green J.A.M., Inall M.E., Palmer M.R., Simpson J.H. and Wiles P.J. 2007. Turbulent dissipation of coastal seas. *Science*, e-Letter 7 June 2007, see [www.sciencemag.org/cgi/eletters/313/5794/1768](http://www.sciencemag.org/cgi/eletters/313/5794/1768).
- Angulo E., Roemer G.W., Berec L., Gascoigne J. and Courchamp F. 2007. Double Allee effects and extinction in the island fox. *Conservation Biology* in press.

Saurel C., Gascoigne J., Palmer M.R. and Kaiser M.J. 2007. In situ mussel feeding behaviour in relation to multiple environmental factors: Regulation through food concentration and tidal conditions. *Limnology and Oceanography* in press.

Simpson J.H., Berx B., Gascoigne J. and Saurel C. 2007. The interaction of tidal advection and diffusion and mussel filtration in a tidal channel. *Journal of Marine Systems* in press.

Medio D., Shepperd C.R.C. and Gascoigne J. 2000. The Red Sea. In *Coral Reefs of the Indian Ocean*. T.R. McClanahan, C.R.C. Shepherd and D.O. Obura (eds.), OUP: 231-255

### **Publications in review or preparation**

Gascoigne J., Saurel C., Williams E., Wiles P., Jones S. and Kaiser M. Processes controlling the vertical structure of chlorophyll in the water column over a shellfish bed.

Folkard A. and Gascoigne J. Flume simulation of flow over spatially-patterned beds of mussels.

### **Popular science writing**

Gascoigne J. Sex and the Single Snail. *New Scientist*, 2002.

Gascoigne J. and van de Koppel J. Patterning in Attached Organisms: from Tiger Bush to Mussel Beds? *Ocean Challenge* 14, 2005.

## JEAN-CLAUDE BRÊTHES

Date de naissance :	4 juillet 1950
<i>Date of birth</i>	
Nationalité :	Canadienne et Française
<i>Citizenship</i>	<i>Canadian, French</i>
Langue maternelle :	Français
<i>Mother language</i>	<i>French</i>
Autres langues :	Anglais (lu, écrit, parlé couramment) / <i>English (fluent)</i>
<i>Other languages</i>	Espagnol (élémentaire) / <i>Spanish (rudimentary)</i>
Adresse professionnelle :	Institut des sciences de la mer
<i>Professional address</i>	Université du Québec à Rimouski
Domaines de spécialisation :	Biologie halieutique / <i>Fisheries biology</i>
<i>Speciality</i>	Océanographie biologique / <i>Biological oceanography</i>
	Écologie marine / <i>Marine ecology</i>
Champs d'intérêt	Dynamique et écologie des populations exploitées. Gestion des pêches.  Systèmes halieutiques.
	Processus océanographiques côtiers : écologie et dynamique des communautés benthiques.
<i>Interests</i>	<i>Dynamics and ecology of exploited species.</i> <i>Fisheries management.</i> <i>Fisheries systems.</i> <i>Coastal oceanographic processes: ecology and dynamics of benthic communities.</i>

### **ÉTUDES SUPÉRIEURES / UNIVERSITY DEGREES**

<b>Diplôme / Degree</b>	<b>Discipline</b>	<b>Université / University</b>	<b>Année / Year</b>
Habilitation à diriger des recherches	Biologie / <i>Biology</i>	Rennes-I (France)	1992
Doctorat 3 <sup>e</sup> cycle / <i>Ph. D.</i>	Océanologie / <i>Oceanology</i>	Aix-Marseille-II (France)	1978
Diplôme d'études approfondies / <i>M. Sc.</i>	Océanologie / <i>Oceanology</i>	Aix-Marseille-II (France)	1973
Maîtrise (système français) / <i>B. Sc.</i>	Biologie animale / <i>Animal Biology</i>	Aix-Marseille-I (France)	1972
Certificat C4 / <i>Certificate</i>	Océanologie / <i>Oceanology</i>	Aix-Marseille-II (France)	1972

### **AUTRES FORMATIONS / OTHER TRAININGS:**

05/1978	Séminaire sur la dynamique des populations exploitées (ACDI et FAO, Casablanca, Maroc).	<i>Workshop on exploited species dynamics (CIDA and FO, Casablanca, Morocco).</i>
05-08/1973	Analyse des eaux douces dans la région de Toulon-Hyères (France). Société du Canal de Provence, Aix-en-Provence.	<i>Analyses of freshwaters in Toulon-Hyères region (France); Société du Canal de Provence, Aix-en-Provence.</i>

## EMPLOIS / POSITIONS

<b>Poste / Position</b>	<b>Institution</b>	<b>Années / Years</b>
Professeur / Professor	Institut des sciences de la mer de Rimouski (ISMER)	1999-...
Professeur / Professor	Département d'océanographie / Oceanography Department Université du Québec à Rimouski (UQAR)	1978 -1999
Directeur, division de la Formation et division de l'Afrique de l'Ouest / <i>Chairman, Training and West Africa Divisions</i>	Centre international d'exploitation des océans, Halifax, Canada. En détachement de l'UQAR. International Centre of Oceans Development, Halifax, Canada. <i>Secondment from UQAR.</i>	09/1987-08/1989
Océanographe / Oceanograph	Office national des pêches du Maroc  National Fisheries Office, Morocco	1975-1978
Professeur de sciences naturelles <i>High school teacher (natural sciences)</i>	Ministère de l'Éducation du Maroc.  Department of Education, Morocco	1973-1975

## FONCTIONS ET RESPONSABILITÉS / FUNCTIONS AND RESPONSIBILITIES

### 1. UNIVERSITÉ / UNIVERSITY

#### Activités administratives

- 2001-2009 Président de l'Assemblée institutionnelle de l'ISMER.
- 2004-2006 Membre du comité d'évaluation du programme de Baccalauréat en biologie.
- 2003-2005 Membre du comité d'élaboration du programme de Doctorat en Gestion des ressources maritimes
- 2000-2009 Membre du Conseil d'administration de la corporation REFORMAR (gestion du navire de recherches)
- 1993-1995 Membre du Conseil d'administration de l'UQAR.
- 1993-1994 Membre du Comité exécutif de l'UQAR.
- 1989-1990 Directeur, groupe d'études des ressources maritimes (GERMA, UQAR).
- 1986-1987 Membre du comité d'élaboration d'un programme de Diplôme en affaires maritimes (avec le Centre international d'exploitation des océans).
- 1985-1986 Directeur, Département d'océanographie, UQAR.
- 1981-1984 Membre du comité d'élaboration de la Maîtrise en Gestion des ressources maritimes.
- 1980-1981 Membre du comité d'élaboration du programme de Doctorat en océanographie.

#### Administrative tasks

- Chairman, Institutionnal Assembly, ISMER.*
- Member, assessment committee of the B. Sc. Program in biology.*
- Member, development committee of the Ph. D. program in Marine Resources Management.*
- Member, board of directors of REFORMAR corporation (management of the research vessel).*
- Member, University board of directors.*
- Member, University executive committee.*
- Director, Marine Resources Study Group (GERMA, UQAR).*
- Member, development committee of the Diploma in Marine Affairs.(with the International Centre for Oceans Development).*
- Chairman, Oceanography Department, UQAR.*
- Member, development committee of the M. Sc, Program in Marine Resources Management.*
- Member, development committee of the Ph. D. Program in oceanography.*

## **2. ACTIVITÉS EXTRA-UNIVERSITAIRES / ACTIVITIES OUTSIDE THE UNIVERSITY**

### **Responsabilités / Responsibilities**

1995-2001	Vice-Président, Conseil pour la conservation des ressources halieutiques (CCRH) du Canada. Organisme conseil auprès du ministre des Pêches et des Océans : conservation des stocks de poisson de fond de l'Atlantique canadien, TAC, De janvier à avril 1996 : président par intérim.	<i>Vice-chairman, Fisheries Resources Conservation Council (FRCC), Canada. Advisory board for the Minister of Fisheries and Oceans: re. Canadian Atlantic groundfish conservation recommendations on TACs, research priorities. January to June 2006: interim chairman.</i>
1993-1995	Membre du CCRH.	<b>FRCC member.</b>
1997-2001	Membre du Conseil scientifique consultatif du ministère des Pêches et des océans du Canada.	Member, Scientific Advisory Council, Department of Fisheries and Oceans, Canada.
1991-1993	Membre du Comité directeur du Comité scientifique consultatif des pêches canadiennes dans l'Atlantique.	<i>Member, Board of Directors of the Canadian Atlantic Fisheries Advisory Council.</i>
1989-1992	Membre du Conseil d'administration du Conseil de l'aquiculture et des pêches du Québec.	<i>Member, Board of Directors of the Quebec Aquaculture and Fisheries Council.</i>
1987	Membre du Conseil des recherches en agro-alimentaire et en pêches du Québec.	<i>Member, Quebec Research Council for food and agriculture.</i>
1987-1989	Directeur, division de la formation puis de la division de l'Afrique de l'ouest et de l'Océan Indien (en détachement de l'UQAR). Centre international d'exploitation des océans (CIEO, Halifax, Canada). Agence de coopération canadienne dans le domaine maritime ; responsable du développement de projets de coopération avec les pays francophones d'Afrique et de l'océan Indien.	<i>Chairman, Training Division and West-Africa and Indian Ocean Division (in secondment from UQAR). International Centre for Ocean Development (ICOD, Halifax, Canada). Canadian Cooperation Agency in various aspects of the marine sector. Responsible for projects developments with French speaking countries in Africa and Indian ocean.</i>

### **Expertise scientifique au Canada / Scientific expertise in Canada**

02-2009	Expert – Session d'évaluation par les pairs des stocks de crabe des neiges du nord du golfe du Saint-Laurent	<i>Scientific expert - Regional Advisory Process for the assessment of the Northern Gulf of St. Lawrence Snow Crabs stocks (DFO).</i>
2008-2009	Coordonnateur – étude de faisabilité pour l'écocertification des pêcheries du homard de Gaspésie et des îles de la Madeleine (Québec) – collaboration avec le ministère de l'Agriculture des Pêcheries et de l'Alimentation du Québec.	<i>Coordinator – feasibility study for the ecolabelling of the lobster fisheries in Gaspésies and Magdalen islands (Quebec) – co-operation with the Quebec department of Agriculture, Food and Fisheries..</i>
2007-2008	Expert – Équipe d'évaluation pour l'éco-certification de la pêcherie de crevette du golfe du Saint-Laurent (Tavel, Halifax, Canada).	<i>Scientific expert – Eco-labelling of the Gulf of St. Lawrence shrimp fishery (Tavel, Halifax, Canada).</i>
03-2008	Président de la session d'examen par les pairs de l'évaluation des deux stocks de morue du golfe du Saint-Laurent (MPO).	<i>Chairman, Regional Advisory Process for the assessment of the two Gulf of St. Lawrence Cod stocks (DFO).</i>
11-2007	Président, atelier sur le développement	

	d'une approche de précaution pour la pêcherie de crabe des neiges du nord du golfe du Saint-Laurent (zone 13). MPO.	<i>Chairman, workshop on the development of the precautionary approach for the Northern Gulf of St. Lawrence snow crab fishery (area 13). DFO.</i>
03-2007	Président de la session d'examen par les pairs de l'évaluation de la morue du nord du golfe du Saint-Laurent (MPO).	<i>Chairman, Regional Advisory Process for the assessment of the Northern Gulf of St. Lawrence Cod stock (DFO).</i>
02-2006	Président de la session d'examen par les pairs de l'évaluation de la morue du nord du golfe du Saint-Laurent (MPO).	<i>Chairman, Regional Advisory Process for the assessment of the Northern Gulf of St. Lawrence Cod stock (DFO).</i>
2005	Expert auprès du Comité Canada-Québec sur le rétablissement des stocks de morue du golfe du Saint-Laurent.	<i>Expert, Canada-Québec Committee for the Recovery of Cod Stocks in the Gulf of St. Lawrence.</i>
2005-2006	Expert – Étude d'impact du harnachement de la rivière Romaine sur les stocks de crabe du nord du golfe du Saint-Laurent (Hydro-Québec).	<i>Scientific expert – Impact studies for the dam project of Romaine river on Northern Gulf of St. Lawrence snow crab stocks (Hydro-Quebec).</i>
02-2005	Président de la session d'examen par les pairs de l'évaluation du stock de morue du nord du golfe du Saint-Laurent (MPO).	<i>Chairman, Regional Advisory Process for the assessment of the Northern Gulf of St. Lawrence Cod stock (DFO).</i>
03-2004	Président de la session d'examen par les pairs de l'évaluation des stocks de crabe des neiges du sud du golfe du Saint-Laurent (MPO).	<i>Chairman, Regional Advisory Process for the assessment of the Southern Gulf of St. Lawrence snow crab stocks (DFO).</i>
2004	Membre du « focus group » (groupe conseil auprès du ministre) pour l'évaluation du nouveau <i>Cadre stratégique de gestion des pêches sur la côte de l'Atlantique</i> du ministère des Pêches et des Océans.	<i>Member of the “focus group” to advise the DFO Minister on the new “Strategic framework for the Canadian Atlantic fisheries.</i>
	Membre du Comité d'experts sur les impacts environnementaux des prospections sismiques dans le golfe du Saint-Laurent (ministère de l'Environnement et ministère des Ressources naturelles du Québec).	<i>Member of the expert committee on the environmental impacts of seismic prospection in the Gulf of St. Lawrence (Departments of Environment and of Natural resources of Quebec)</i>

## EXPÉRIENCE INTERNATIONALE / INTERNATIONAL EXPERIENCE

### Expertise scientifique / Scientific expertise

2007-2008	Expert – Équipe d'évaluation pour l'éco-certification de la pêcherie de mullet jaune du Banc d'Arguin, Mauritanie (Société MacAllister-Elliott, G-B).	<i>Expert – Assessment team for the ecolabeling of the Yellow Mullet fishery, Banc d'Arguin, Mauritania (MacAllister-Elliott, G-B).</i>
2007	Expert – Audit scientifique du Programme National de Recherches Crevettières, Madagascar (Odyssée, France)	<i>Expert – Scientific audit of the National Shrimp Research Program, Madagascar (Odyssée Dvpt, France).</i>
1999-....	Membre du Comité scientifique de	

2007-...	l’Institut mauritanien de recherches en océanographie et en pêches (nommé par décret ministériel).	<i>Member, Scientific Advisory Committee, Mauritanian Fisheries and Oceanography Research Institute.</i>
11-2006	Président, Comité Scientifique consultatif pour le suivi de la pêcherie de praires en Mauritanie.	<i>Chairman, Scientific Advisory Committee for the clam fishery in Mauritania.</i>
08-2004	Expert invité : Atelier sur l’évaluation des stocks halieutiques Mauritaniens (Nouadhibou, Mauritanie).	<i>Expert: Workshop on the assessment of fisheries resources in Mauritania.</i>
12-2003	Mission en Mauritanie pour la Société MacAllister-Elliott (G-B) : étude d’impact de l’exploitation pétrolière extra-côtière.	<i>Expert : revision of impact study on the offshore oil exploitation in Mauritania (MacAllister-Elliott, G-B)</i>
09-2002	Expert invité : Atelier sur l’évaluation des stocks halieutiques Mauritaniens (Nouadhibou, Mauritanie).	<i>Expert: Workshop on the assessment of fisheries resources in Mauritania.</i>
07-2000	Expert pour l’évaluation du programme de coopération FAC-II (Coopération française) au Centre de recherches de Boussoura, Guinée-Conakry (Institut français de recherches pour le développement –IRD).	<i>Expert : assessment of the French cooperation program FAC-II in the Boussoura Research Centre, Guinée-Conakry (Institut français de recherches pour le développement –IRD).</i>
09-1999	Chercheur invité à l’Institut national des sciences et technologies de la mer, Tunis (Tunisie), dans le cadre du projet PRICAT-RIDGEMER (financement ACDI)	<i>Invited scientist, National Marine Sciences and Technology Institute, Tunis (Tunisia); CIDA PRICAT-RIDGEMER project.</i>
10-1994	Évaluation institutionnelle du Centre National de Recherches Océanographiques et des Pêches de Mauritanie.	<i>Institutional assessment of the National Oceanographic and Fisheries Research Centre, Mauritania</i>
06-1993	Expert pour l’évaluation des programmes de recherche en pêche industrielle du Centre national de recherches halieutiques de Boussoura, Guinée-Conakry (Institut français de recherches pour le développement - IRD-).	<i>Expert : assessment of the research programs on industrial fishery, Boussoura Research Centre, Guinée-Conakry (Institut français de recherches pour le développement –IRD).</i>
11-1992	Expert pour l’évaluation d’un projet de gestion intégrée des ressources marines en Guinée-Bissau (Centre d’étude et de coopération internationale, Montréal, Canada).	<i>Expert : assessment of a project on the integrated management of marine resources in Guinea-Bissau (Centre d’étude et de coopération internationale, Montréal, Canada).</i>
	Expert invité au Séminaire « Ressources et Pêche côtière en Méditerranée septentrionale » (Ancone, Italie, 16-20 novembre), organisé par les Instituts de recherches halieutiques des pays riverains de la Méditerranée en collaboration avec la Direction générale des pêches de la Communauté Européenne.	<i>Invited scientist: international workshop “Resources and Coastal Fisheries in Northern Mediterranean Sea” (European Union).</i>

## *Autres expertises / Other expertises*

11-2008	Professeur invité : Master en biotechnologie, Université de Bretagne Sud, Vannes, France.	<i>Guest professor; M.Sc. in biotechnology, University of South Bretagne, Vannes, France.</i>
01-2000 + 05-2000	Professeur invité à l’Institut national agronomique de Tunis (Tunisie), dans le cadre du projet RIDGEMER-PRICAT	<i>Guest professor, Tunisian Agronomic Institute (CIDA).</i>

	(financement ACDI).
1997 -2003	Professeur invité, École Nationale Supérieure Agronomique (Rennes, France) : 1 mois/an.
06-1998	Conférencier invité. Université d'été sur l'évaluation des stocks, École Nationale supérieure agronomique (Rennes, France).
1991	Responsable de l'organisation logistique et pédagogique d'un cours en gestion des pêches pour les pays francophones d'Afrique de l'ouest et de l'océan Indien (Maroc, 27 mai-14 juin 1991). Cours financé par le CIEO; 30 participants, 15 pays représentés.

### EXPÉRIENCE D'ENSEIGNEMENT /TEACHING EXPERIENCE

Cours d'écologie marine et d'océanographie (premier et deuxième cycle, base annuelle). Rédaction de notes de cours.	<i>Lectures in marine ecology and oceanography (1<sup>st</sup> and 2d cycles, annual basis). Lecture notes</i>
Cours d'océanographie expérimentale (2e cycle); responsable pendant neuf ans de l'organisation du stage de terrain des étudiants à la Maîtrise en océanographie.	<i>Course in Experimental Oceanography (2d cycle): 9 years experience in the organization and implementation of a scientific cruise for the M.Sc. students in oceanography.</i>
Cours de biologie halieutique (2e cycle, base annuelle). Rédaction de notes de cours.	<i>Lectures in fisheries sciences (2d cycle, annual basis). Lecture notes.</i>
Cours d'écologie marine pour les étudiants de 1 <sup>ère</sup> et 2 <sup>e</sup> années de l'École nationale supérieure agronomique de Rennes (France).	<i>Lectures in marine ecology at the Superior School of Agronomy in Rennes (France)</i>
Cours en biologie et gestion des pêches à la maîtrise à l'Université de Bretagne-Sud (France)	<i>Lecture in fisheries biology and management at the M. Sc. Level at the University of Southern Brittany (France).</i>

### ACTIVITÉS DE RECHERCHE / RESEARCH ACTIVITIES

Dynamique et structure spatiale des populations. Interaction entre la dynamique des flottilles et la dynamique des stocks :	<i>Dynamics and spatial structure of populations. Interactions between fleets dynamics and stock dynamics</i>
Divers projets sur l'écologie du crabe des neiges, du homard et de la morue en collaboration avec des chercheurs du ministère des Pêches et des océans.	<i>Various projects on the ecology of snow crab, lobster and cod, in co-operation with scientists from the Department of Fisheries and Oceans.</i>

### ENCADREMENT D'ÉTUDIANTS / STUDENTS SUPERVISION

#### DOCTORAT EN OCÉANOGRAPHIE / PhD IN OCEANOGRAPHY

- Trois directions, deux terminées
- Quatre codirections, deux terminées
- *Three supervisions, two completed.*
- *Four co-supervisions, two completed*

#### MAÎTRISE EN OCÉANOGRAPHIE / M. Sc. IN OCEANOGRAPHY

- Vingt-quatre directions, terminées
- Vingt-trois codirections, 18 terminées
- *Twenty-four supervisions, completed.*
- *Twenty-three co-supervisions, 18 completed*

#### MAÎTRISE EN GESTION DES RESSOURCES MARITIMES / M. Sc. IN MARINE RESOURCES MANAGEMENT

- Huit directions, 7 terminées
- *Height supervisions, 7 completed.*

## PUBLICATIONS (6 dernières années / last 6 years)

### PARTICIPATIONS À DES OUVRAGES COLLECTIFS

- BRÊTHES, J.-C. et A. FONTANA (éd). 1992. *Recherches interdisciplinaires et gestion des pêcheries.* Projet CIEO-890276, Centre international d'exploitation des océans (Halifax, Canada), 222 p.  
Rédacteurs en provenance de l'Université Laval (Québec), du Centre de recherches océanographiques de Dakar-Thiaroye (Sénégal), de l'ORSTOM et de l'IFREMER (France).
- Brêthes, J.C. Introduction (notion de système, la recherche interdisciplinaire).
  - Brêthes, J.-C. La Variable biologique (Chap. 2 : pp 29-64).
  - Brêthes, J.-C. et Y. Breton. Étude de cas : l'introduction de la pêche au crabe des neiges sur la Basse Côte-Nord du golfe du Saint-Laurent (pp 151-172).
- BRÊTHES, J.-C. et R.N. O'BOYLE (éd.). 1990. *Méthodes d'évaluation des stocks halieutiques.* Projet CIEO-860060, Centre international d'exploitation des océans (Halifax, Canada), 963 p.
- Brêthes, J.-C. L'évaluation et la gestion des stocks: principes de base (Chap 2 : pp 7-16).
  - Brêthes, J-C. Le processus d'évaluation des stocks (Chap. 3 : pp 17-30).
  - Brêthes, J-C. Analyse critique d'article : utilisation des modèles de surplus de production (Chap. 24 : pp 661-678).
  - O'Boyle, R. et J.-C. Brêthes. Étude de cas sur les modèles de production excédentaire (Chap. 25 : pp 679-724).
  - Brêthes, J-C. Analyse critique de document : les modèles analytiques (Chap. 26 : pp 725-750).
  - O'Boyle, R. et J.-C. Brêthes. Étude de cas : utilisation des modèles analytiques (Chap. 27 : pp 751-842).

### Dans le cadre des activités du Conseil pour la conservation des ressources halieutiques (sélection) *In the context of the Fisheries Resources Conservation Council of Canada (selection)*

- FRCC.97.R3      A Groundfish Conservation Framework for Atlantic Canada (July/97) -  
Responsable de l'équipe de rédaction.
- FRCC.96.TD.2    From Moratorium to Sustainability : Criteria for Re-opening and Sustainable Harvesting, with Reference to Cod Stocks in Areas 3Ps, 4T4Vn and 3Pn4RS (June/96).  
Membre de l'équipe de rédaction
- FRCC.95.R1.     A Conservation Framework for Atlantic Lobster (Nov./95). Membre de l'équipe de rédaction.

Note: *Le CCRH publiait de 1993 à 2004 une série de rapports annuels émettant des recommandations de conservation pour les stocks de poissons de fonds de l'Atlantique canadien.*

*From 1993 to 2004, FRCC published a series of annual reports recommending conservation measures aiming at the conservation of groundfish stocks in Canadian Atlantic.*

### ARTICLES DANS DES REVUES AVEC COMITÉ DE LECTURE / REFERRED ARTICLES

(Les noms d'auteur en italiques correspondent à des étudiants encadrés par J.-C. Brêthes).  
(Names in italics correspond to students supervised by J.-C. Brêthes)

#### Article soumis – Submitted paper

NADEAU, M., M. BARBEAU, J.C. BRÊTHES. Soumis. Behavioural mechanisms of sea stars (*Asterias vulgaris* Verrill and *Leptasterias polaris* Müller) and crabs (*Cancer irroratus* Say and *Hyas araneus* Linnaeus) preying on juvenile sea scallops (*Placopecten magellanicus* (Gmelin)) and procedural effects of scallop tethering on these mechanisms. *Journal of Experimental Marine Biology and Ecology.* Juin 2008 (JEMBE-D-08-00313 – en révision).

#### Articles publiés / published papers

MARION, A., M. HARVEY, D. CHABOT, & J.-C. BRÊTHES. 2008. Feeding ecology and predation impact of the recently established amphipod, *Themisto libellula*, in the St. Lawrence marine system, Canada. *Marine Ecology Progress Series* 373 : 53-70.

MEDINA, A., J-C, BRÊTHES, & J.-M. SÉVIGNY. 2008. Habitat fragmentation and body shape variation of *Cephalopholis taeniops* (Valenciennes, 1828) in an archipelago system (Cape Verde, Eastern Atlantic Ocean). *Journal of Fish Biology* 73: 902-925.

PUEBLA, O., J.-M. SÉVIGNY, B. SAINTE-MARIE, J.-C. BRÊTHES, A.D. BURMEISTER, E.G. DAWE & M. MORIYASU. 2008. Population genetic structure of the snow crab (*Chionoecetes opilio*) at the Northwest Atlantic scale. *Canadian Journal of Fisheries and Aquatic Sciences* 65: 425-436.

- MEDINA, A., J-C, BRÊTHES, J.-M. SÉVIGNY & B. ZAKARDJIAN.* 2007. How geographic distance and depth drive ecological variability and isolation of demersal fish communities in an archipelago system (Cape Verde, Eastern Atlantic Ocean). *Marine Ecology* 28 (3) : 404-413.
- VALADOU, B., J.-C. BRÊTHES & C.A. INEJIH.* 2006. Données biologiques et écologiques sur cinq espèces d'élasmobranches présentes dans les eaux du Parc National du Banc d'Arguin (Mauritanie). *Cybium* 30(4) : 313-322.
- BOURGEOIS, M., J.-C. BRÊTHES & M. NADEAU.* 2006. SUBSTRATE EFFECTS ON SURVIVAL, GROWTH AND DISPERSAL OF JUVENILE SEA SCALLOP, *PLACOPECTEN MAGELLANICUS* (GMELIN 1791). *J. SHELLFISH RESEARCH* 25 (1): 43-49
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- DULUC, C., B. SAINTE-MARIE & J.-C. BRÊTHES.* 2005. Value of indicators for assessing recent mating in brachyuran crabs. *J. Marine Biological Association, UK* 85 : 129-135.
- SIBERT, V., P. OUELLET & J-C. BRÊTHES.* 2004. Changes in yolk total proteins and lipid components and embryonic growth rates during lobster (*Homarus americanus*) egg development under a simulated seasonal temperature cycle. *Marine Biology* 144 (6): 1075-1086.
- NAUD, M.-J., LONG, B. J.-C. BRÊTHES & R. SEARS.* 2003. Influences of underwater bottom topography and geomorphology on minke whale (*Balaenoptera acutorostrata*) distribution in the Mingan Islands (Canada). *J. Marine Biological Association, UK*, 83 : 889-896.
- PAILLE, N., B. SAINTE-MARIE & J-C BRÊTHES.* 2002. Behavior, growth and survival of instar V lobsters (*Homarus americanus*) in relation to shelter availability and lobster density. *Marine and Freshwater Behavior and Physiology* 35(4): 203-219.
- GENDRON, L. & J-C. BRÊTHES.* 2002. Simulations of the impact of different temporal and spatial allocations of fishing effort on fishing mortality in a lobster (*Homarus americanus*) fishery. *Journal canadien des sciences halieutiques et aquatiques* 59 : 899-909.

## AUTRES TRAVAUX ARBITRÉS

- YVELIN, J.-F., A. FRECHET & J.-C. BRÊTHES.* 2005. PARCOURS MIGRATOIRES ET STRUCTURE DU STOCK DE LA MORUE DU NORD DU GOLFE DU SAINT-LAURENT (3PN, 4RS). *SECRÉTARIAT CANADIEN DE CONSULTATION SCIENTIFIQUE, DOC. RECH. 20055/055* : 56P.
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- BRÊTHES, J.-C. 2004. Compte rendu de l'examen par les pairs des stocks de crabe des neiges du sud du golfe du Saint-Laurent, Région du Golfe. Secrétariat canadien de consultation scientifique, série des comptes rendus 2004/014 : 37p.
- BRÊTHES, J.-C. 2003. Book review. *J. Crust. Biol.* 23(2).

## COMMUNICATIONS DANS DES CONFÉRENCES ARBITRÉES / COMMUNICATIONS IN REFERRED CONFERENCES

### *Actes de colloques / Symposium proceedings*

- BRÊTHES, J-C. 2005. Prédatation et ensemencement de pétoncles : un système complexe. In : M. Nadeau & G. Tita (éd.), Atelier de travail "Prédatation du pétoncle et gestion des ensemencements, îles de la Madeleine, 25 février-1<sup>er</sup> mars 2004. MAPAQ, DIT, Compte-rendu n° 24 : 8-10.
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2      CONFÉRENCES ARBITRÉES / REFERRED CONFERENCES
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- NADEAUM, J.C. BRÊTHES & M. BARBEAU.* 2006. Caractérisation de la dynamique des pétoncles et des prédateurs à court terme après des ensemencements à grande échelle aux Îles-de-la-Madeleine, Québec. Colloque « Rendez-vous de l'industrie maricole : Édition 2006 ». Gaspé, Québec, mars 2006.
- PUEBLA, O., J.-M. SÉVIGNY, B. SAINTE-MARIE, J.-C. BRÊTHES.* 2004. Population genetic structure of the snow crab (*Chionoecetes opilio*) at the northwest Atlantic scale : A case of high marine connectivity. American Association of Limnology and the Oceanography Society 2004 Conference, Honolulu, HI (USA), 15-20 Feb 2004.
- BRETHES, J.-C. & M.G. BOURGEOIS.* 2003. Substrate effect on survival, growth and dispersal of juvenile sea scallop (*Placopecten magellanicus*, Gmelin) seeded off Magdalen Islands (Quebec, Canada). 14th International Pectinid Workshop, St Petersburg, FL (USA), 23-28 Apr 2003.
- BRETHES, J.-C., M.-H. RONDEAU & E. LUCE.* 2003. L'analyse de l'espace halieutique à l'interface de l'éologie et de la géographie humaine. 6<sup>e</sup> Forum halieumétrique, Montpellier (France), 24-26 juin 2003.

- BRETHES, J.-C. 2003. Petite histoire récente de la pêcherie de morue canadienne, de l'euphorie à l'oubli. 6<sup>e</sup> Forum halieumétrique, Montpellier (France), 24-26 juin 2003.
- VALADOU, B., J.-C. BRÊTHES & C.A.O. INEJIH. 2003. La pêche à la Raie guitare *Rhinobatos cemiculus* sur le Banc d'Arguin (Mauritanie) : impacts biologiques et implications sociales. 6<sup>e</sup> Forum halieumétrique, Montpellier (France), 24-26 juin 2003.
- SIBERT, V., J.-C. BRÊTHES & P. OUELLET. 2003. Recrutement et succès reproducteur : qualité des œufs chez le homard *Homarus americanus*. 6<sup>e</sup> Forum halieumétrique, Montpellier (France), 24-26 juin 2003. ).
- BOURGEOIS, M., J.-C. BRÊTHES & M. NADEAU. 2003. Substrate effects on survival, growth and dispersal of juvenile sea scallop (*Placopecten magellanicus*). 14<sup>ième</sup> Pectinid Workshop, Avril 2003. St-Petersburg (Florida).
- DULUC, C., B. SAINTE-MARIE & J-C BRÊTHES. 2003. Les femelles multipares du crabe des neiges (*Chionoecetes opilio*) se réaccouplent-elles pour compenser leurs réserves de sperme insuffisantes? 71<sup>e</sup> Congrès de l'ACFAS, Rimouski, mai 2003.
- PUEBLA, O, J-M SÉVIGNY & J-C BRÊTHES. 2003. Structure génétique des populations de crabe des neiges (*Chionoecetes opilio*) à l'échelle de l'Atlantique du Nord-Ouest : analyse par l'utilisation de micro-satellites. 71<sup>e</sup> Congrès de l'ACFAS, Rimouski, mai 2003.
- BRIAND, K., D. CHABOT, B. SAINTE-MARIE & J-C BRÊTHES. 2003. Utilisation d'un prédateur, la morue, pour déterminer la distribution et les préférences environnementales des juvéniles du crabe des neiges (*Chionoecetes opilio*). 71<sup>e</sup> Congrès de l'ACFAS, Rimouski, mai 2003.
- BRÊTHES, J-C, R. DUFOUR & F. MAPS. 2003. Détermination des points de référence pour une pêcherie émergente : simulation de la pêche au crabe araignée (*Hyas coractatus*) du nord du golfe du Saint-Laurent. 71<sup>e</sup> Congrès de l'ACFAS, Rimouski, mai 2003.
- BRETHES, J.-C. 2003. L'espace maritime : milieu bio-physique et espace social. Colloque « territorialité, espace et droits d'usage dans le domaine marin). 71<sup>e</sup> Congrès de l'ACFAS, Rimouski, mai 2003.
- BRÊTHES, J.-C. 2002. LA BIOLOGIE HALIEUTIQUE: UNE SCIENCE EN QUESTION. 27<sup>E</sup> CONGRÈS DE L'ASSOCIATION DES BIOLOGISTES DU QUÉBEC, RIMOUSKI, 14-15 NOVEMBRE 2002 (SUR INVITATION).

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PEREZ AGUNDEZ, J.A. & J.-C. BRETHES. 2002. PARALLEL COLLAPSES OF CANADIAN COD (*GADUS MORHUA*) AND EUROPEAN HAKE (*MERLUCCIUS MERLUCCIUS*) FISHERIES: "CHRONICLE OF A DEATH FORETOLD". CONGRÈS DE L'INTERNATIONAL INSTITUTE FOR FISHERIES ECONOMICS AND TRADE, WELLINGTON (NOUVELLE-ZÉLANDE), 19-22 AOÛT 2002.

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#### **COMMUNICATIONS ET ARTICLES SANS JURY / NON REFERRED PAPERS AND CONFERENCES**

BRETHES, J.-C. 2008 (SUR INVITATION /INVITED SPEAKER). ÉCO-CERTIFICATION DES PRODUITS MARINS : DE QUOI PARLE-T-ON? REVUE FRANCVERT (QUÉBEC), 5 (2), PRINTEMPS 2008.

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BRÊTHES J.-C. 2007 (sur invitation / *invited speaker*). Perspectives halieutiques dans le système du Saint-Laurent et contextes insulaires. Centre de recherche sur les milieux insulaires et maritimes (CERMIM, îles de la Madeleine (Québec), 25 mai 2007.

BRÊTHES, J.-C. 2006 (sur invitation / *invited speaker*). Démarche scientifique et recherche orientée (recherche et développement). Regroupement des mariculteurs du Québec, Gaspé (Québec), 20 mars 2006.

BRÊTHES, J.-C. 2006 (sur invitation / *invited speaker*). Quelques décennies de gestion des pêches au Canada. École nationale supérieure agronomique de Rennes (France).

## Curriculum Vitae

**Sophie des Clers**

### **Education**

Date, Institution	Degree(s) or Diploma(s) obtained
1985, Université Lyon I, France	PhD in Biometrics (Quantitative Ecology) Sept. 82-Sept.85 Doctorat de Biométrie, Mention Très Honorable
1998, University College London, UK	MSc in Public Policy, University College London (European Environmental Policy, European Law and Institutions, Public Policy, Machinery of Government, Judicial Review, Microeconomics). Sept.97-Sept.98
1978, Université Paris 6, France	Post-graduate degree in Quantitative Ecology Sep.77-Sept.78, Diplôme d'Etudes Approfondies, Université Paris 6, France
1978, International Institute for Applied Systems Analysis, Laxenburg, Austria	Post-graduate course in Ecological Systems Analysis Jul.78-Sept.78
1977, Université Paris 7, France	Post-graduate degree in Natural Sciences Sept.72-Aug.77 Maîtrise ès Sciences

### **Language skills** (Competence on a scale of 1 to 5: 1- excellent, 5- basic)

Language	Reading	Speaking	Writing
French	1	1	1
English	1	1	1
Spanish	2	4	5
Italian	3	5	5

**Membership of professional bodies:** International Institute for Fisheries Economics and Trade (IIFET), Ecological Economics Society, Fellow of the Royal Geographical Society

**Computer skills:** Microsoft Word, Excel, Powerpoint, Access

**Present position:** Fisheries Consultant and Honorary Research Fellow – University College London, Department of Geography

### **Key qualifications**

- 25 years of combined Research, Consultancy, Team and Project Management experience
- Fisheries ecology and socio-economic assessment and management advice practice to government and fishing businesses (Falkland Islands Trawling Loligo squid and Long-lining Toothfish fisheries; Mauritanian Octopus fisheries; UK Thames estuaries fish and shellfish and fisheries)
- Highly quantitative and computer literate, excellent command of spoken and written technical English and French, excellent public presentation and interpersonal skills
- Bi-lingual English and French
- Research, Teaching (undergraduate and Postgraduate) and research fundraising and contract management experience at UCL, Warwick University and Imperial College since 1986.

### Professional experience

Date from-to	Description
Since 1992	Independent Consultant
Since 2007	Honorary Research Fellow, Department of Geography, UCL
2005-2006	Teaching Fellow, Department of Geography, UCL
2001-2005	Senior Research Fellow, Department of Geography, UCL
1999-2001	Research Fellow, UCL Jackson Environment Institute
1997-1998	Principal Research Fellow, Ecosystems' Analysis and Management Group, Department of Biological Sciences, Warwick University.
1994-1997	Research Fellow, Falkland Islands Fisheries Management Group for the Falkland Islands Government Fisheries Department, Imperial College, London.
1986-1997	Research Fellow, Renewable Resources Assessment Group, Imperial College, London.
1980-1985	Scientific Officer, Head of Data Analysis Laboratory, Freshwater Quality, Fisheries and Aquaculture Division, CEMAGREF, Ministère de l'Agriculture, Paris and Lyon, France.

### Consultancy and Research Projects

End year	Countries, Activities, Client
2009	<b>EC.</b> Research projects evaluator (since 2000: FP5, FP6 and FP7), European Research and International Co-operation (INCO Developing ACP and Mediterranean countries). European Commission EC-DG Research and DG-Fish in support of policy, for Fisheries, Marine Environment and Water Resources programmes.
2008-9	<b>Greater Thames Estuary, UK.</b> Socio-Economic appraisal of coastal fisheries sector. Team leader in charge of survey design and data analysis, MEP Consultants Ltd.
2008	<b>France</b> , MSC pre-assessment expert for two separate fisheries (a shellfish and a finfish), Bureau Veritas Certification.
2007-8	<b>England and Wales.</b> National Water Temperature Archive and analysis of climate change in rivers, lakes and estuarine ecosystems in England and Wales. Team leader in charge of data sourcing, analyses and reporting, Environment Agency, Ensis Ltd.
2007-8	<b>Devon, Dorset and Somerset, UK.</b> Expert advice to FisherMap, a Finding Sanctuary project to record fishermen's use of the sea, FIFG and others. Expert advice on data collection and stakeholder engagement protocol.
2007	<b>Rome, West and Central Africa.</b> Interactions between the Oil & Gas industry activities and Sustainable Fisheries Livelihood in 25 countries of West and Central Africa: Policy Information analysis, and management and mitigating recommendations (3 months). Expert Report (desk study) to Sustainable Fisheries Livelihood Programme UN-FAO and DFID.
2006	<b>Senegal, Gabon, Mozambique, Uganda, Fiji and New Caledonia.</b> Complementary Feasibility Study for ACP-FishII, a project to strengthen Fisheries Management capacity in ACP countries. Update of all key documents to reflect budget increase to €5million, field visits to Senegal, Gabon, Mozambique, Uganda, Fiji and New Caledonia. Team leader, in charge of social and environmental aspects, team of three with economist and knowledge base experts, July to December. EC-AIDCO.
2006	<b>Senegal.</b> Evaluation of PAPA-Sud, a 5-year project in support of artisanal fisheries south of Dakar (including Saloum and Casamance, 7 weeks). Team leader, in charge of socio-economic evaluation, team of three with infrastructure and training experts. EC delegation in Senegal.
2006	<b>UK.</b> Fishing Strategy and management recommendations for the East of England region. Part of team of three in charge of environment, catching, processing and marketing sector SWOT analyses and recommendations (2 months). East of England Regional Development Agency (EEDA) UK.
2006 2005	<b>OECD Paris.</b> Benefit cost analysis of integrating the High Seas Fishing Vessel information scheme with the Equasis Merchant Marine Vessel database. Team of two, in charge of SWOT analysis and Data information systems. The High Seas Task Force, OECD Paris.

End year	Countries, Activities, Client
2006	<b>World.</b> IPCC - WG II. Corresponding author – Fisheries and Aquaculture Socio-Economics: Impacts, Mitigation and Adaptation (World Ch. 5 and Europe Ch. 12)
2005	<b>UK.</b> Expert - Conception and delivery Marine Stakeholder Knowledge Training Workshop on the collection of local ecological knowledge to inform the choice of Marine Protected Areas in the SW of England (September). Finding Sanctuary (Natural England, Exeter) UK.
2005	<b>Senegal.</b> Negotiation Capacity building Workshop (2 days) and Training day – Information needs, role play and logical framework for future R&D programme and improved fisheries management. Joint Team leader in charge of delivery with international legal expert, the World Conservation Union IUCN and West African Regional sub-regional Fisheries Commission (CSRP - 7 countries).
2005	<b>UK, Denmark, France, Italy, Spain.</b> PECHDEV-FP5 Integration of environment constraints in CGE model of regional economic development in EU fisheries-dependent regions: Project partner, in charge of Work Package linking Ecology with regional economics. Research Framework 5. Uni. Portsmouth Lead Partner, EU - EC Fish Directorate General.
2004	<b>UK.</b> Leigh on Sea Sustainable Fishing Port development, stakeholder consultation and representation at Public Enquiry for London Port development. Expert Advice to Leigh Port Partnership, and Southend Borough Council (Essex) UK Local authorities
2003	<b>UK.</b> Harwich Fisheries Ecosystem Description and Monitoring: Development of ecosystem description and monitoring framework for and with local fishermen in the wake of the proposed Bathside Bay container port development. Port Authority (Harwich Haven) UK.
2003	<b>UK.</b> Research and management strategy for the Thames Estuary Research Forum priorities: Evaluation and Report. Coastal Partnership (Thames Estuary) UK.
2002	<b>EC.</b> Independent representative for the Environment at the EC Advisory Committee for Fisheries and Aquaculture during the reform of the Common Fisheries Policy. Environmental NGOs (WWF-Europe, RSPB-European Policy), EC – Brussels.
2001	<b>EC.</b> New Concepts and Indicators in Fisheries and Aquaculture. Workshop Rapporteur and editor - EC Research DG, Brussels Belgium.
2001	<b>EC.</b> Port-Cities project Coordination of the case studies delivery for the Sustainable Development of Port-Cities project (partner ports: Rotterdam-industrial ecology, Cork, Dunkirk-Environmental Management Systems, Le Havre-Environmental regulations, Rouen-integrated planning). Thames Estuary Partnership-EC Interreg II, UK, Ireland, France, Netherlands.
2001	<b>South Georgia (Antarctica).</b> Expert to the High Court in the Quark Fishing case regarding the procedure for Toothfish fishing licensing and management measures operated by Her Majesty's Foreign Office in South Georgia (Antarctica). Thomas Cooper & Stibbard, Maritime Lawyers, London.
2001	<b>EC.</b> AXES workshop presentation in Montpellier (France). Invited presentation: Environmental externalities linked to the fisheries and aquaculture sector at regional level. EC Framework 5 Research, Montpellier, France.
2001	<b>UK.</b> Survey of the Greater Thames Estuary Fisheries Knowledge, based on interviews and meetings with commercial fishermen along the coasts of Kent and Essex. Essex Estuaries Initiative (Colchester Borough Council), UK.
2001	<b>UK.</b> Fish prices and electronic auctions. Analysis of Government price statistics and interviews of fishermen, fish salesmen, fish buyers and fish market agents around the UK and the EU: part of team of three, in charge of Nephrops and Scottish ports. MAFF Economic Research.
2001	<b>Falkland Islands.</b> Expert to the High Court in the Factortame case regarding damages owed by Her Majesty's MAFF to squid vessels operating in the Falkland Islands in 1989. Thomas Cooper & Stibbard, Maritime Lawyers, London.
2001	<b>USA.</b> Translation of the IUCN Handbook Research and Management Techniques for the Conservation of Sea Turtles (English into French, 235pp.). IUCN/SSC Marine Turtle

End year	Countries, Activities, Client
	Specialist Group, USA.
2000	<b>EC.</b> Integrating Biodiversity and European Fisheries Policy: Rebuilding a healthy and productive ecosystem. Briefing Paper. WWF-UK (EC DG Environment)
2000	<b>EC.</b> ACACIA Report chapter on the Impact of climate change on European fisheries, within a multi-disciplinary team Concerted Action. EC DG Environment
2000	<b>UK.</b> Regionalisation of the EU Common Fisheries Policy: Report and briefing notes. World Wide Fund for Nature – UK.
1999	<b>Philippines.</b> ICLARM Resource person to the FISHBASE Biodiversity Project Steering Committee. Manila.
1998	<b>UK.</b> Financial Implications for Fisheries Recovery Plans. Research and Project report on the use of EU Structural Funds in the Scottish Highlands and Islands Fisheries Sector. Institute for European Environmental Policy (WWF – UK funding).
1998	<b>Mauritania.</b> Stock Assessment and Fisheries Management in the Mauritanian EEZ One of three Workshop coordinators, Nouakchott, Islamic Mauritanian Republic. Mauritania. Mauritanian Research Institute CNROP (FAO-UN funding).
1998	<b>UK.</b> Analysis of the interactions between European, National and Local Fisheries Policies in the United Kingdom and their implications for fisheries management. Marine Education and Conservation Trust.
1998	<b>UK.</b> Feasibility of a greater local involvement in Fisheries' Management in the UK: Two case studies (Pittenweem, Scotland and Maryport, Cumbria). World Wide Fund for Nature.
1997	<b>UK.</b> Networking small fishing co-operatives through the internet: Feasibility study. Local Authority Fife Council, Scotland.
1997	<b>Mauritania.</b> Leader, team of six. Institutional strengthening of the Industrial Fisheries Directorate, Ministry of Fisheries, Mauritania. Mauritanian Ministry of Planning (EU STABEX fund).
1997	<b>Falkland Islands.</b> Development of Fisheries Management models for the Falkland Islands Fisheries Department, covering the determination of allowable effort, catch quota and valuation of fishing licences. The Falkland Islands Government, Fisheries Department.
1996	<b>UK.</b> Analysis of ongoing structural adjustments of the European Fishing Fleet. World Wide Fund for Nature.
1996	<b>UK-EU.</b> Costs and benefits of the European bilateral Fisheries Agreements. Results presented to the House of Lords' European Affairs Committee, highlighting potential efficiency improvements to the current policy. World Wide Fund for Nature.
1995	<b>Norway.</b> Principal Investigator, Interactions between seals and fisheries in the Oslofjord, Norway, notably as a consequence of the viral epidemic that had killed two thirds of the seal colony (5 years). Norwegian Fisheries Research Council (NFFR).
1994	<b>UK.</b> Analysis of long term pike and perch population changes from Lake Windermere to establish the extent of long-term natural variations in UK freshwater fish populations. Ministry for Agriculture, Food, and Fisheries (now DEFRA) and NERC.
1994	Expert analysis of existing management measures and the commercial potential for the offshore shrimp fishery in the Vietnam Exclusive Economic Zone (EEZ). Private Fishing Group, desk study.
1993	<b>Mauritania.</b> Expert in team of three. Strengthening of Mauritanian Fisheries Research Institute CNROP. Recommendations on the structure (including details such as staff pay packages) and research programming of the Institute. Mauritanian Ministry of Planning (EU STABEX fund).
1993	<b>Mauritania.</b> Expert in Team of 2. Reform of Fiscal System in the Mauritanian Fisheries Sector for improved fisheries management. Recommendations led to the reorganisation of the Mauritanian Fiscal System in the Fisheries sector voted by the Mauritanian Parliament in 1994. Mauritanian Ministry of Planning (EU STABEX fund).
1992	<b>UK.</b> Analysis of fish disease prevalence rates in the North Sea (Development of a sampling strategy for parasite monitoring in Scottish cod). Scottish Office Agriculture, Fisheries and Food (now SEERAD).
1992	<b>UK.</b> Analyses of the population dynamics of <i>Pseudoterranova decipiens</i> infections in Atlantic

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	cod ( <i>Gadus morhua</i> ). Population models to explain past and present trends in parasitic infections in cod landed at British ports; design of a monitoring programme subsequently operated by the Marine Laboratory of the Scottish Office. Department of Agriculture, Food and Fisheries for Scotland and Natural Environment Research Council, London.
1991	<b>South-East Asia.</b> Statistical bases to detect infection and estimate prevalence in tropical aquaculture. Published as a Handbook of statistical guidelines and methods for the use of fish farmers and quarantine installations. Overseas Development Administration (now DfID), Aquaculture Programme.
1987	<b>UK.</b> Analyses of the population dynamics of <i>Pseudoterranova decipiens</i> infections in Atlantic cod ( <i>Gadus morhua</i> ). Population models to explain past and present trends in parasitic infections in cod landed at British ports. Department of Agriculture, Food and Fisheries for Scotland (now SEERAD), Aberdeen.
1985	<b>France.</b> Population dynamics of Northern pike ( <i>Esox lucius</i> ) in the Seine near the Montereau power plant (upstream Paris). National Electricity Company (EDF).
1981	<b>France.</b> Modelling temperature changes, eutrophication and algae growth in lakes. French National Research Council (DGRST).

### Invited Expert

- ▶ 2008 – Environmental Statistics Section of the Royal Statistical Society, Climate and Ecology meeting, University of Reading, 26 November, Surface Water Temperature Archive.
- ▶ 2008 – Thames21 and UCL Department of Civil, Environmental & Geomatic Engineering, UK. Mapping for sustainable communities (London, 17 June)
- ▶ 2007 – Sea Fish Industry Authority, UK. Marine Spatial planning and protected areas. Presentation on Fishing Industry contribution to Marine Spatial Planning (Newcastle, 26-27 March)
- ▶ 2006 – IUCN-DG DEV Countdown to 2010. Invited Workshop. Scoping paper on Biodiversity, Development and Trade - EU Fisheries Agreements in West Africa (Paris, 19-21 Sept.)
- ▶ 2006 – North Sea Regional Advisory Council, Marine Spatial Planning Working Group (London, 7-8 February)
- ▶ 2005 – DfID, Climate Change and Fisheries (London, 12 September)
- ▶ 2005 – EC, European Fisheries Development Advisers Annual Meeting (London, 4-5 July).
- ▶ 2004 – NERC, Edinburgh 2 September, Open meeting: Science for Sustainable Marine Bioresources, How can socio-economic research help achieve sustainable fishery management?
- ▶ 2004 – EC, DG Fish, Bundoran 27-29 May, Role of Fishing, Aquaculture and related activities in the development of coastal zones - conceptual aspects.
- ▶ 2002 – Dutch Fisheries Ministry, The Hague 19 September, Overview of fisheries effort management regimes in conservation policies.
- ▶ 2001 – EC DG Research, Brussels 3-4 December, New Concepts and Indicators in Fisheries and Aquaculture.
- ▶ 2001 – WWF-International, Sally Portudal, Senegal. 26-29 March (Optimum resource Use, Total Allowable Catches and Harvesting capacity)
- ▶ 2001 – SAIL (EC-Interreg II sponsored project), Social sciences and coastal fisheries management, Colchester, 12 December 2000
- ▶ 2000 – WWF-UK. Integrating Biodiversity and European Fisheries Policy: Rebuilding a healthy and productive ecosystem (Institutional Constraints at local, national and European levels, Göteborg, Sweden and Brussels).
- ▶ 1999 – California Fish and Game Dept. Scientific Committee meeting on Loligo Squid Fisheries. Long Beach, California 19-23 July.
- ▶ 1999 - EC DG Research - Brussels, 16 -18 June. ACACIA Project - EU meeting on Policy implications of Climate Change.
- ▶ 1999 – ICLARM – Manila Philippines, 1 – 4 June. Resource person to the FISHBASE Biodiversity Project Steering Committee.

- ▶ 1998 – CNROP – Nouadhibou Mauritania, 7-13 December. Resource Assessment Workshop, Co-editor of final FAO report and public presentation of the Workshop key recommendations to Fisheries Minister
- ▶ 1998 – WWF International - Marine Stewardship Council Conference. Member of Panel "How science can influence political will" - Lisbon, Sept.
- ▶ 1998 - European Community - ACP - EU Fisheries Research Initiative, Lisbon, 1st to 4th July. Conference “Ocean Food Webs and Economic Productivity” - EXPO98 (On fishermen’s information requirements to be able to make sustainable economic decisions).
- ▶ 1997 - EC DG Dev - Brussels, 1st to 3rd December. ACP - EU Expert consultation on the Fisheries Information and Analysis System (FIAS).
- ▶ 1997 - Fisheries Centre, University British Columbia, Vancouver Canada, 21st to 22nd November. “Back to the Future” Workshop on the historical reconstruction of marine ecosystems.
- ▶ 1997 - CalCOFI California Co-operative Oceanic Fisheries Investigations, Market squid Symposium, Lake Arrowhead, California USA 28th to 30th October. Management and scientific advice on the Falkland Islands Loligo squid fishery.
- ▶ 1997 - North Atlantic Marine Mammal Council (NAMMCO), Working Group on interactions between seals and fisheries, Tromsø, Norway, March. Monitoring sealworm infections in Scottish cod landings.
- ▶ 1997 - House of Lords - Select Committee on the European Communities - Agriculture, Fisheries and Consumer Protection, London November. Third Country Fisheries Agreements, Written and Oral Evidence.
- ▶ 1996 - International Workshop on Viruses in Shrimp Farms, Guyaquil, Ecuador, June. Quantitative epidemiological methods.
- ▶ 1995 - European Parliament, Fisheries Committee, Brussels, September. Hearing on Multi-species management (Interactions between seals and fisheries).

### **Expert Reports and Scientific Publications**

- ☒ **des Clers, S., et al** 2008. FisherMap Final Report, in the press.
- ☒ **des Clers, S.,** M. Hughes and G. Simpson, 2008. Surface Water Temperature Archive, Environment Agency and CCW, Science Report, in the press.
- ☒ **des Clers, S.** 2007. Mitigating the Impacts of Oil Exploration and Production on Coastal and Wetlands livelihoods in West / Central Africa. Expert Report to FAO-SFLP, 79p.
- ☒ **des Clers, S.** Barnes, C. and P. Medley, 2007. Feasibility Study for a Programme on Strengthening Fisheries Management in ACP Countries. Poseidon Report to EC-AIDCO, 122p + Technical, Administrative and Bibliographical Annexes.
- ☒ **des Clers, S.,** Delincé, G. and O. Guindo 2006. Final Evaluation of EC-funded Programme to strengthen small-scale fisheries in South Zone (PapaSud). Poseidon Report to EC-Delegation in Dakar, Senegal.
- ☒ **des Clers, S.** 2006. Contributing Author IPCC Working Group II, Fisheries and Aquaculture Socio-Economics Chapter 5 (World) and Chapter 10 (Europe).
- ☒ Maslin, M and **S. des Clers** 2005. Editorial: Enlightenment in four dimensions. Transactions of the Institute of British Geographers Sept. 2005, Volume 30: 267-268.
- ☒ **des Clers, S.** 2004. Connecting with Fisheries: Coastal Fishermen’s maps and Ecosystem Description. In Delivering Sustainable Coasts: Connecting Science and Policy, D. Green (ed.) Littoral 2004 Proceedings Vol.1: 377-380.
- ☒ **des Clers, S.** 2004. Fishermen’s Maps  
<http://www.cefas.co.uk/coastmap/coastmap5.pdf>. Coast Map News No5:9-10.
- ☒ **des Clers, S.** 2003. A Fisheries Ecosystem Approach: From counting fish to herding cats. Invited column, Ocean Challenge, European Issue 13(2): 17
- ☒ **des Clers, S.** 2003. Harwich Fisheries Ecosystem Description and Monitoring Strategy. Report to the Harwich Haven Port Authority, 44pp.

- ☒ **des Clers, S.** and C. Nauen. (eds.) 2002. New Concepts and Indicators in Fisheries and Aquaculture, Workshop report. EC Cooperative Fisheries Research Report Series No 13, 25p (trilingual).
- ☒ P. Failler and **des Clers, S.** 2002. Perspectives d'extension économique et sociale du modèle écologique ECOPATH *in* La recherche halieutique et le développement durable des ressources naturelles marines de l'Afrique de l'Ouest : quels enjeux ? EC Cooperative Fisheries Research Report Series No 11 : 10pp.
- ☒ P. Failler, **des Clers, S.** and, P. Bernard, (eds.) 2002. AXES - Research Orientations for the development of new tools and models to evaluate the contribution of aquaculture and fishing activities to the development of coastal areas and their socio-economic interactions with other sectors. Workshop report. CEMARE Report series, Portsmouth University, 180pp.
- ☒ **des Clers, S.** 2002. Environmental integration as a basis for regional fisheries management in Europe – a UK perspective *in* P. Failler, des Clers, S and, P. Bernard, (eds.) AXES : 37-59.
- ☒ **des Clers, S.**, C. Dat and S. Carrier, 2001. Survey of Greater Thames Estuary Knowledge, Final Report to Essex Estuaries Initiative.  
[http://www.essexestuaries.org.uk/about/fameset\\_plan\\_greater\\_thames.htm](http://www.essexestuaries.org.uk/about/fameset_plan_greater_thames.htm)
- ☒ Banks, R, **S. des Clers** and G.McFadyen, 2001. Economic Research Project : Fish prices and electronic auctions in the UK (Richard Banks Ltd Report to MAFF now Defra,103pp.)
- ☒ **des Clers, S.** 2001. Expert Report, and Joint Expert Report to the High Court, London UK. Factortame case regarding vessels fishing in the Falkland Islands and South Atlantic waters.
- ☒ **des Clers, S.** (2001). Contributing Author IPCC Working Group II, Fisheries and Aquaculture Socio-Economics Chapter 5 (World) and Chapter 10 (Europe).
- ☒ **des Clers, S.** 2000. WWF-UK Final Report on the Regionalisation of the Common Fisheries Policy.
- ☒ **des Clers, S.** 2000. Integrating Biodiversity and EU Fisheries Policy. WWF-UK Workshop papers Report, December 2001 23-32. (Invited presentation, WWF-UK and DG Environment)
- ☒ **des Clers, S.** 2000. Decentralisation of the CFP: Can resource scarcity be internalised in the production process of fishing firms? (Invited presentation, EC-sponsored Concerted Action on Fisheries Economics, Vigo, 28-30 October.) *in* CEMARE EC Workshop Report.
- ☒ **des Clers, S.** and K. Brander, 1999. Impact of climate change on European Fisheries, ACACIA project Report on the Assessment of the Potential Effects of Climate Change in Europe, 195-206 and 333-335.
- ☒ Grist, E.P.M. and **S. des Clers**, 1999. Seasonal and genotypic influences on life-cycle synchronization: Further insights from annual squid. Ecological Modelling 115 (2-3): 149-163.
- ☒ **des Clers, S.** in Nautilus Ltd., 1999. The Regionalisation of the Common Fisheries Policy (CFP), impact on structural Policy and Multi-Annual Guidance Programmes (MAGPs) in relation to Agenda 2000. Brussels, European Parliament, Directorate General for Research, Division for Agriculture, Fisheries, Forestry and Rural Development, 82pp.
- ☒ **des Clers, S.**, 1998. European support for sustainable fisheries: Assessment of European Structural Funds use in the UK Highlands and Islands (Objective 1) region. Report to the Institute for European Environmental Policy (IEEP). London, 30pp.
- ☒ **des Clers, S.** 1998. Information needed by fishermen to make sustainable economic decisions. EC Fisheries Cooperation Bulletin 11(3-4): 34-41 (English and French versions) Dec.

- ☒ **des Clers, S.** 1998. More Local involvement in UK Fisheries Management: A feasibility study. Project Report. WWF-UK, 70pp.
- ☒ Hatfield, E.M. and S. des Clers, 1998. Fisheries management and research for *Loligo gahi* in the Falkland Islands, in G. Hemmingway ed., CALCOFI Report No 39.
- ☒ **des Clers, S.**, 1998. Sustainability of the Falkland Islands *Loligo* squid fishery. in E.J. Milner-Gulland and R. Mace (eds.) Biological Conservation and Sustainable use. Blackwell Science: 225-242.
- ☒ Grist, E.P.M. and **S. des Clers**, 1998. How seasonal temperature variations may influence the structure of annual squid populations. Journal of Mathematics Applied in Medicine and Biology, 15: 1-22.
- ☒ **des Clers, S.**, 1998. Structural adjustments of the distant fleet of European factory trawlers fishing for *Loligo* squid in Falkland Islands waters, in Property Rights and regulatory systems for Fisheries, D. Symes (ed.) Fishing News Books: 143-152.
- ☒ **des Clers, S.**, 1997. East Neuk Fishing Industry and Economic Networking. On the national and international networking of local fishing communities for marketing purposes. Report to Fife Council (local authority - Scotland) - Economic Development Service, Unpublished Report 16pp.
- ☒ **des Clers, S.** 1997. Review of recent developments in the European Common Fisheries Policy. Report to WWF-UK, 70pp.
- ☒ J.-P. Troadec, M. Bâ, M. Chérif, M. Dia, **S. des Clers** et C. de Verdelhan, 1997. Strengthening of the Mauritanian Fisheries Ministry (Identification d'un projet de renforcement de la Direction de la Pêche Industrielle du Ministère de la Pêche et de l'Économie Maritime). IFREMER Report, to République Islamique de Mauritanie, 150p (in French).
- ☒ **des Clers, S.**, 1997. Transcription of evidence given to the House of Lords Select Committee on European matters, session 1996-1997: EU International Fisheries Agreements. Report, HMSO London 101pp: 13-26.
- ☒ **des Clers, S.**, 1996. Costs and benefits of the EU / Third country fisheries agreements. Leaflet WWF-UK, 3 pp.
- ☒ **des Clers S.** and J. Prime, 1996. Seals and fishery interactions: observations and models in the Firth of Clyde (Scotland) in Greenstreet, S. and M. Tasker (eds), Aquatic Predators and their Prey, Fishing News Books. 124-132.
- ☒ Shinn A.P., **S. des Clers**, D.I. Gibson and C. Sommerville, 1996. Multivariate Analyses of morphometrical features from *Gyrodactylus* (Monogenea) species parasitising British salmonids: Light microscopy based studies. Systematic Parasitology 33(2), 115-125.
- ☒ **des Clers, S.**, C. Nolan, R. Baranowski and J. Pompert, 1996. Preliminary stock assessment of the Patagonian toothfish longline fishery around the Falkland Islands. J. Fish Biology 49 (Supp. A): 175-181.
- ☒ **des Clers, S.**, 1995. Structural adjustment of the European fishing fleet. Leaflet WWF-UK, 3 pp.
- ☒ Andersen, K., **S. des Clers**, and T. Jensen, 1995. Aspects of the sealworm *Pseudoterranova decipiens* life-cycle and seal-fisheries interactions along the Norwegian coast in A.S Blix, L. Walloe and Ø.Ulltang (eds), Whales, seals, fish and man. Elsevier Science B.V.: 557-564.
- ☒ **des Clers, S.** And K. Andersen, 1995. Sealworm (*Pseudoterranova decipiens*) transmission from Hvaler, Oslofjord, Norway. J. Fish Biology 46: 8-17.
- ☒ **des Clers, S.**, S. Cunningham and P. Howgate, 1994. Reinforcement of the Mauritanian National Fisheries Research Institute (Centre National de Recherches Océanographiques et des Pêches), MRAG Ltd Report to République Islamique de Mauritanie, 81p (in French).
- ☒ **des Clers, S.**, 1994. Sampling to detect infections and estimate prevalence in Aquaculture. Pisces Press, Stirling, Scotland 58pp.

- ❑ Jensen, T., Andersen, K., **des Clers, S.**, 1994. Sealworm infections in demersal fish from two areas in Norway. *Can. J. Zool.* 72(4): 598-608.
- ❑ Siddall, R. and **S. des Clers**, 1994. Effect of sewage sludge on the miracidium and cercaria of *Zoogonoides viviparus* (Trematoda, Digenea), *Helminthologia* 31: 143-153.
- ❑ **des Clers, S.**, I.J. Winfield, J.M. Fletcher, G.P. Kirkwood, P.R. Cubby and J.R. Beddington, 1993. Further analysis of the long-term Windermere perch and pike data. Institute of Freshwater Ecology Report to MAFF, 50p.
- ❑ **des Clers, S.**, 1993. Modelling the potential impact of disease-induced mortality on the population size of wild salmonids, *Fisheries Research* 17: 237-248.
- ❑ Sarley, D. and **S. des Clers**, 1993. Appraisal and proposed reform of the fiscal system for the Mauritanian Fisheries Sector. Maxwell Stamp plc Report, to République Islamique de Mauritanie, 106p (in French).
- ❑ Bray, R.A. and **S. des Clers**, 1992. Multivariate analyses of metrical features in the *Lepidapedon elongatum* (Lebour, 1908) species-complex (Digenea, Lepocreadiidae) in deep and shallow water gadiform fishes of the NE Atlantic. *Systematic Parasitology* 21: 223-232.
- ❑ **des Clers, S.**, 1991. Functional relationship between sealworm (*Pseudoterranova decipiens*, Nematoda, Ascaridoidea) burden and host size in Atlantic cod (*Gadus morhua*). *Proc. R. Soc. Lond. B* 245: 85-89.
- ❑ Lorenzen, K. **des Clers, S.** and Anders, K., 1991. Population dynamics of lymphocystis disease in estuarine flounder (*Platichthys flesus*). *J. Fish Biology* 39(4): 577-587.
- ❑ **des Clers, S.**, 1991. Models for a *Bonamia ostrea* epidemic in a cohort of cultured European flat oysters *Ostrea edulis*. *Aquaculture* 93: 253-262.
- ❑ **des Clers, S.** and Wootten, R., 1990. Modelling the population dynamics of the sealworm *Pseudoterranova decipiens*. *Neth. J. Sea Res.* 24: 291-301.
- ❑ **des Clers, S.**, 1990. Modelling the life-cycle of the sealworm (*Pseudoterranova decipiens*) in Scottish waters in W.D. Bowen [ed.] *Population biology of the sealworm in relation to its intermediate and seal hosts*. *Can. Bull. Fish. and aquat. Sci.* 222: 273-288.
- ❑ **des Clers, S.** and R. Mohn, 1990. Models Group Report, in W.D. Bowen [ed.] *Population biology of the sealworm in relation to its intermediate and seal hosts*. *Can. Bull. Fish. and aquat. Sci.* 222: 255-260.
- ❑ **des Clers, S.** 1989. Modelling regional differences in 'sealworm' *Pseudoterranova decipiens* (Nematoda, Ascaridoidea) infections in some North Atlantic cod, *Gadus morhua*, stocks. *J. Fish Biology* 35 (Suppl. A): 187-192.
- ❑ **des Clers, S.**, 1985. Contribution to the population biology of pike (*Esox lucius*). Estimation of mortality and recapture probabilities using log-linear models (in French), Thèse de 3ème cycle, Univ. Lyon I, 150p.
- ❑ **des Clers, S.** and J. Allardi, 1983. Natural reproduction and survival of stocked fish in the river Seine upstream Paris (in French), in Billard, R. ed., *Le Brochet (*Esox lucius*)* (in French). INRA Publ., Paris: 297-303.
- ❑ Chahuneau, F., **des Clers, S.** and J.A. Meyer, 1983. Analysis of prediction uncertainty by Monte-Carlo simulation in a non-linear least-squares estimation of a vertical transport sub-model for Lake Nantua (France). in Beck, M.B. and G. van Straten (eds), *Uncertainty and Forecasting of Water Quality*. Springer-Verlag: 183-203.
- ❑ Chahuneau, F. and **S. des Clers**, 1980. Food-web models in pond aquaculture (in French). in Billard, R. ed., *La Pisciculture en étang*, INRA Publ., Paris: 129-138.
- ❑ Chahuneau, F. **des Clers, S.** and J.A. Meyer, 1980. Simulation models in Lake Ecology. Review and analysis of different approaches (in French). *Acta Oecologica, Oecol. generalis* 1(1): 27-50.
- ❑ Chahuneau, F. and **S. des Clers**, 1979. Mathematical models and control of eutrophication in lakes (in French). in *L'Eau, La Recherche et L'Environnement*: 61-71. Ministère de l'Environnement Publ., Paris.