

**52<sup>nd</sup> Meeting of the Standing Committee**

*Online, 21 – 29 September 2021*

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UNEP/CMS/StC52/Doc.14

**APPOINTMENT OF COP-APPOINTED COUNCILLOR**

*(Prepared by the Secretariat, in consultation with the Chair of the Scientific Council)*

Summary:

This document summarizes progress in the process for the identification of candidates for a COP-appointed Councillor position to be appointed by the Standing Committee on behalf of the Conference of the Parties, and the recommendations of the Sessional Committee in this regard.

The Standing Committee is expected to consider the nominations, in light of the recommendations of the Sessional Committee, and make the appointment for the position for the intersessional period between COP13 and COP14.

## APPOINTMENT OF COP-APPOINTED COUNCILLOR

### Background

1. As recommended by the Sessional Committee of the Scientific Council at its 4<sup>th</sup> meeting (ScC-SC4), the 13<sup>th</sup> meeting of the Conference of the Parties to CMS (COP13) agreed on the establishment of a COP-appointed Councillor position within the Sessional Committee of the Scientific Council, for the intersessional period between COP13 and COP14, to cover the subject areas of invasive species, disease, feral animals, insects, marine pests and weeds. COP13 could not make an appointment for the position due to the late submission of nominations, and entrusted the Standing Committee with the appointment in consultation with the Sessional Committee.

### Nominations for the position, and recommendation of the Sessional Committee

2. A call for nominations of candidates for the position was issued by the Secretariat in consultation with the Chair and Vice-Chair of the Scientific Council through [Notification 2021/001](#). The call produced a total of 7 nominations, which are compiled in the annex to this document.
3. The nominations were transmitted to the members of the Sessional Committee by the Secretariat on behalf of the Chair of the Scientific Council. Members were invited to express their preferences as regards the candidate to be appointed.
4. On the basis of the number of preferences received, the following nominated candidates are recommended by the Sessional Committee to the Standing Committee for consideration for appointment, ranked as follows:
  1. Ruth Cromie
  2. Ursula Höfle
  3. Tatiani Elisa Chapla

### Recommended actions

5. The Standing Committee is recommended to:
  - a) Consider the nominations for the COP-appointed Councillor position, in light of the recommendations of the Sessional Committee of the Scientific Council;
  - b) Make the appointment for the position for the intersessional period between COP13 and COP14.

**ANNEX****NOMINATIONS OF CANDIDATES FOR COP-APPOINTED COUNCILLOR SUBJECT AREAS OF INVASIVE SPECIES, DISEASE, FERAL ANIMALS, INSECTS, MARINE PESTS AND WEEDS**

1. In consultation with the Chair and Vice-Chair of the Scientific Council, the Secretariat has sought nominations from the Contracting Parties for suitable candidates for the COP-appointed Councillor subject areas of invasive species, disease, feral animals, insects, marine pests and weeds.
2. To this effect [Notification 2021/001](#) was issued by the Secretariat. The notification included instructions for nominating candidates, which should include a statement justifying the candidature, a CV of the candidate, as well as a declaration by the candidate expressing its readiness to accept the appointment if selected.
3. The nominations received in response to the Secretariat's call are contained in the following attachments to the present document, in the language in which they have been received.

Attachment 1 – Nomination of MSc Marle Patricia Aguilar Ponce, submitted by the Government of Honduras

Attachment 2 – Nomination of Dr Christine Marie V. Casal, submitted by the Government of the Philippines

Attachment 3 – Nomination of Dr Tatiani Elisa Chapla, submitted by the Government of Brazil

Attachment 4 – Nomination of Dr Ruth Cromie, submitted by the Government of the United Kingdom

Attachment 5 – Nomination of Prof. Ursula Höfle, submitted by the Government of Spain

Attachment 6 – Nomination of Dr. Melanie Josefsson, submitted by the Government of Sweden

Attachment 7 – Nomination of Dr. Sebataolo Rahlao, submitted by the Government of South Africa

**ATTACHMENT 1**

**NOMINATION OF MSC MARLE PATRICIA AGUILAR PONCE**

*(Submitted by the Government of Honduras)*

Tegucigalpa M.D.C. 15 de Febrero de 2021

OFICIO No. DIBIO N°-002-2021

Señores  
**Convención de Especies Migratorias**  
Su Oficina.

Reciban un cordial saludo por este medio, se ha nominado como candidata para el consejo de la COP “Especies Invasoras”, a la MI. Marle Aguilar, Analista de esta dirección General de Biodiversidad y como suplente al Lic. David Jaén Sierra, adjunto enviamos correos electrónicos

- MI. Marle Aguilar: \_\_\_\_\_
- Lic. David Jaen Sierra:

Agradeciendo de antemano su apoyo y colaboración me despido.



LIC. OSCAR RENE MEJIA MEJIA

Director Interino de la Dirección General de Biodiversidad  
Secretaria de Recursos Naturales y Ambiente  
(MIAMBIENTE+)

CC.: Archivo  
OM/vl

Tegucigalpa MDC. 18 de febrero 2021

Sr. Marco Barbieri  
Asesor Científico de la CMS

Distinguido Sr. Barbieri,

En base la nominación realizada por la Secretaria de Recursos Naturales y Ambiente (MiAmbiente+) de Honduras para candidatura como “Consejero designado por la COP para especies invasoras”, me permito expresar que acepto dicha propuesta por considerar reúno los requisitos que para tal se requiere; como bióloga de profesión, master en ingeniería del agua, con un especialización en gestión del medioambiente y como analista ambiental de MiAmbiente+ en más de 8 años he coordinado y colaborado en el desarrollo de marcos políticos y de gestión ambiental a nivel nacional (políticas, normas, protocolos, Estrategias Nacionales , planes de acción, etc.) con énfasis en la implementación del Convenio sobre la Diversidad Biológica y convenios relativos, así como en la generación y participación de espacios nacionales de análisis técnico-científicos sobre diferentes temas incluyendo dentro de estos el control y erradicación de especies invasoras, como ser: protección de especies silvestres de importancia para la conservación, tráfico y comercio de especies, protección de recursos genéticos, análisis en la liberación de OVM, así como en la promoción de la investigación científica y metodologías técnico-científicas para contrarrestar las diferentes amenazas sobre la biodiversidad en base a las necesidades de país.

Esperando que lo anteriormente expresado sea considerado para la aceptación a la candidatura como consejero designado por la COP para especies invasoras

Atentamente,

**M.I. Marle Aguilar Ponce**  
Analista ambiental  
DiBio/MiAmbiente+

# MARLE PATRICIA AGUILAR PONCE



## Experiencia Laboral

Secretaría de Recursos Naturales y Ambiente, MiAmbiente+

### a) [Coordinación Técnica](#) / Proyecto Global ABS PNUD-GEF 2017 – 2021

Como contraparte de la Secretaría de Recursos Naturales y Ambiente (MiAmbiente+); desarrollando y coordinando acciones de: Planificación y ejecución de actividades técnicas, administrativas y financieras para el alcance de sus componentes y objetivos; gestión de espacios para el fortalecimiento de Capacidades Nacionales a instituciones públicas, privadas, académicas y comunidades en temas sobre y relativos al medio ambiente, Biodiversidad, convenios internacionales, entre otros; coordinando mecanismos y procesos para la generación de propuestas de normativas nacionales para el acceso a los recursos genéticos; Generación de conocimientos a través de mecanismos y espacios de concertación con pueblos indígenas y Afrohondureños, en temas bioculturalidad, participación de beneficios y el respeto a la propiedad intelectual, Establecimiento de alianzas con la academia para el desarrollo y promoción de la investigación sobre recursos naturales; creación y fortalecimiento de redes de voluntarios Formadores de formadores sobre biodiversidad y temas afines. Conformación y fortalecimiento de estructuras de trabajo interinstitucional. Desarrollo de informes y reportes técnicos a cooperantes; Trabajo coordinado con instituciones gubernamentales y no gubernamentales, acciones de ejecución y desempeño a través de equipos multidisciplinarios, redacción de términos de referencias para el desarrollo de consultorías y parte de equipo de selección de los procesos.

### b) [Analista Ambiental](#) 2012 – A LA FECHA

Punto focal nacional del Protocolo de Nagoya sobre acceso a los recursos genéticos y la participación justa de los beneficios del Convenio sobre la Diversidad Biológica, representante país en espacios de dialogo y negociaciones técnico-científicas ante convenciones internacionales; planificación y ejecución de acciones para la implementación de programas de trabajo de convenios relativos a la biodiversidad y el medio ambiente. Coordinación, desarrollo y apoyo de actividades orientadas al fortalecimiento de capacidades institucionales y a organizaciones representativas de Pueblos indígenas y Afrohondureños; desarrollo de iniciativas sobre monitoreo biológico, agro biodiversidad, pesquería, biocomercio y actividades de apoyo sobre investigación de los recursos naturales y la biodiversidad nacional; Gestión de recursos técnico- financieros con organismos donantes nacionales e internacionales, análisis de estudios relacionados a la auditoria, licenciamiento, control y seguimiento ambiental. Gestión de áreas naturales de conservación e implementación de nuevas metodologías de manejo sostenible; enlace técnico de proyectos y programas de agencias internacionales. Actividades desarrolladas bajo la metodología de gestión en base a resultados en el cumplimiento de los objetivos y metas propuestas.

ENERO – MARZO 2012

Laboratorio ELIZMAR. Cedeño, Choluteca / [Pasante Técnico de Laboratorio](#)

Análisis y control de la sanidad y calidad de las larvas, Técnicas de identificación de patologías, Análisis físico-químicos de calidad agua para cultivo, Análisis físico-químico de calidad de aguas residuales, Almacenamiento

de progenitores, Ciclo gestacional: Cría larval – maduración hasta la siembra en fincas, Producción de algas y artemias, Almacenamiento intensivo, Control de Calidad de Agua abastecedora y residuales.

ENERO – JULIO 2011

Consejo de Cuenca Rio La Soledad. Valle de Ángeles, Francisco Morazán / [Técnico Ambiental](#)

Acciones de fortalecimiento y capacitación a organizaciones comunitarias (cajas rurales, patronatos, juntas de agua) sobre conservación del medio ambiente y el recurso hídrico, Monitoreos e instalación de sistemas de cloración y calidad del agua de las fuentes de abastecimiento, trabajando conjuntamente con AHJASA y juntas de aguas rurales; elaboración de planes y proyectos de desarrollo comunitario, como ser proyectos de letrinización, y fortalecimiento de capacidades locales; elaboración del plan de acción ambiental participativo para la declaratoria de zonas de recarga hídrica, levantamiento de diagnóstico comunitario, Monitoreo biológico entomológico e hídrico. Realización de talleres y Ferias Ambientales coordinando con escuelas y colegios. Planificar, desarrollar jornadas de talleres.

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## Educación

OCTUBRE 2018

[Master en Ingeniería del Agua](#) / Universidad de Sevilla, Sevilla España

Formación académica en evaluación de la problemática del agua; adquiriendo conocimientos para el desarrollo de metodologías adecuadas para su aprovechamiento sostenible; identificación de alternativas y tecnologías convencionales y no convencionales para el manejo y tratamiento de aguas residuales y potable; con un enfoque en la determinación de las metodologías apropiadas para la adquisición, exploración y uso del recurso hídrico; y la evaluación y selección de distintas alternativas eficientes de gestión del sector hídrico desde una aproximación integral y multidisciplinaria en el marco del desarrollo sostenible.

ENERO – JULIO 2017

[International Postgraduate Course on Environmental Management for Developing and Emerging Countries](#) / Technische Universität Dresden. Dresden, Alemania

Formación y entrenamiento de habilidades de relevancia fundamental e intersectorial, en asesoramiento sobre políticas y gestión de proyectos en el contexto de países en vías de desarrollo económico, comunicación a través de disciplinas y prácticas gubernamentales participativas, comprensión de plataformas de geo-información, desarrollo de estrategias interdisciplinarias para el desarrollo sostenible, desarrollo de medidas apropiadas para la protección ambiental que tengan en cuenta los aspectos ecológicos, socioeconómicos y culturales, conocimientos la identificación e implementación de modelos y estrategias sostenibles para la optimización de sistemas y flujos de materiales.

DICIEMBRE 2010

[Licenciatura en Biología con orientación en aguas](#) / Universidad Nacional Autónoma de Honduras, Tegucigalpa Honduras

Formación investigativa y analítica sobre los sistemas vivos, incluyendo la ecología y sus interacciones, manejo de técnicas de laboratorio, formación en la elaboración de planes y proyectos de monitoreos e investigaciones básicas y aplicadas sobre los recursos naturales, socialización con comunidades, enfoque en limnología, calidad de agua; Formación en manejo de recursos naturales, áreas de conservación, y cuencas hidrográficas. Entrenamiento en el uso de sistemas y programas de información satelital y bioestadísticas.



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## Experiencia Profesional

- Especialista en Biodiversidad, cambio climático y manejo del medioambiente
- Enlace técnico de proyectos y programas nacionales y regionales sobre medio ambiente y biodiversidad.
- Coordinación técnica de proyectos nacionales relativos a la biodiversidad
- Participación como representante nacional ante organismos y tratados internacionales
- Establecimiento de mecanismos nacionales para la implementación y el cumplimiento de convenciones internacionales relativas al medio ambiente y biodiversidad.
- Desarrollo de metodologías para la inclusión en equidad y género, incluyendo la moderación de espacios de generación de conocimiento y capacitación
- Diseño y elaboración de propuestas de proyectos nacionales, logrando a través de gestiones de recursos técnicos y financieros con agencias donantes nacionales e internacionales su implementación
- Integrar equipos de trabajo técnico en la preparación y revisión de políticas y normas reguladoras (políticas, leyes, reglamentos) basadas y relacionadas en la conservación de la biodiversidad y los recursos naturales y su uso sostenible.
- Habilidad de desarrollar y evaluar estrategias multidisciplinarias enfocadas en la gestión del medio ambiente y en la adecuación de medidas más eficiente en un marco de desarrollo sostenible; tomando en cuenta aspectos ecológicos, socio-económicos y culturales
- Manejo y gestión de espacios de conservación (Áreas protegidas, Corredores Biológicos, Sitios Ramsar, entre otros) considerando prácticas de producción sostenibles, captura de carbono y beneficios locales con un enfoque Ecosistémico.
- Planificación y desarrollo de estrategias orientadas a sociedad civil con énfasis en pueblos indígenas y afrohondureños para desarrollar espacios de diálogo y concertación de participación comunitaria, bajo el contexto de consentimiento y consulta pública.
- Análisis y elaboración de estudios sobre impacto ambiental de proyectos de desarrollo económico, infraestructura y desarrollo social; analizando afectaciones e identificando medidas de mitigación compensación ambiental y social
- Experiencia en la elaboración de mecanismos de planificación y evaluación de resultados

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## Formación continua

**Curso-Taller: Metodología para construir y sostener indicadores ambientales ODS**  
CEPAL-MiAmbiente-INE. Marzo, 2020

**Taller de entrenamiento: Evaluación del Riesgo de Extinción de Especies Silvestres, usando la metodología de la lista Roja de la UICN**  
UICN-MiAmbiente-UNAH  
Febrero 2019

**Curso-Taller; Estableciendo las medidas para implementar el Protocolo de Nagoya**  
IDLO-CBD-PNUD  
Junio 2018

**German Language Course (A1)**  
TU DRESDEN-CIPCEM-BMUB  
Julio 2017

**Curso Teórico Practico: Principio de Biología Sintética**  
UCC-UNAH  
Abril 2020

**Taller para los Puntos Focales Nacionales del Protocolo de Nagoya y el TIRFFAA en América Latina y el Caribe**  
CIP-Biodiversity-CBD-FAO  
Septiembre 2018

**Seminario Regional para Compartir Experiencias de la Conservación Participativa de la Biodiversidad en los Países del SICA**  
MAPCOBIO-MINAE- JICA. Septiembre 2017

**Workshop on Project Management**  
TU DRESDEN-CIPCEM-BMUB  
Junio 2017

**“English Foreign Language” Program**  
The American School, English Academy  
Tegucigalpa, Honduras C.A.  
Octubre 2015

**Curso “Uso de sistemas de información geográfica y sensores remotos para mejorar la sostenibilidad ambiental en Honduras” niveles básico y avanzados**  
ICF, MIAMBIENTE, COPECO, Embajada de China-Taiwán  
Tegucigalpa, Honduras C.A. agosto 2014

**Facilitadora Modulo del Segundo Curso virtual de “Enfoque de Género en REDD+”**  
USAID-ProParque, Maestría Latinoamericana de Trabajo Social-UNAH  
Julio 2014

**Taller de Capacitación Regional para América Latina y el Caribe sobre “Conocimientos tradicionales en el marco del Convenio de Diversidad Biológica”**  
RMIB-LAC, OTCA, CDB  
Cochabamba, Bolivia. Diciembre 2013

**Curso “Relación entre regulaciones globales de acceso y distribución de beneficios derivados de los recursos genéticos y los derechos de propiedad intelectual”**  
South Center, BMZ-Germany, GIZ, UNTACD  
Antigua Guatemala, Guatemala. Enero 2013

**Seminario “Recursos Genéticos, Conocimientos Tradicionales, Expresiones Culturales Folclore”**  
Organización Mundial de Propiedad Intelectual, Dirección de Propiedad Intelectual.  
Tegucigalpa, Honduras. Agosto 2012

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## Competencias

- Respeto y Responsabilidad
- Motivación al cambio positivo y adaptabilidad
- Proactivo
- Capacidad de planificación y facilitación
- Liderazgo y conducción
- Coordinación y trabajo en equipo
- Resolución de Conflictos

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## Otros Datos

- |                 |  |                     |   |
|-----------------|--|---------------------|---|
| <b>Idiomas:</b> | <ul style="list-style-type: none"><li>• <b>Inglés:</b> C1</li><li>• <b>Portugués:</b> A1</li><li>• <b>Alemán:</b> A1</li></ul> | <b>Informática:</b> | <ul style="list-style-type: none"><li>• <b>Microsoft Office:</b> Avanzado</li><li>• <b>Herramientas de geo-referenciación:</b> Intermedio</li><li>•</li></ul> |
|-----------------|--|---------------------|---|
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**ATTACHMENT 2**

**NOMINATION OF DR CHRISTINE MARIE V. CASAL**

*(Submitted by the Government of the Philippines)*



Republic of the Philippines  
**Department of Environment and Natural Resources**  
**BIODIVERSITY MANAGEMENT BUREAU**  
Ninoy Aquino Parks and Wildlife Center  
Quezon Avenue, Diliman, Quezon City  
Tel. Nos.: (632) 924-6031 to 35 Fax: (632) 924-0109, (632) 920-4417  
Website: <http://www.bmb.gov.ph> E-mail: [bmb@bmb.gov.ph](mailto:bmb@bmb.gov.ph)



**FEB 26 2021**

**MS. AMY FRAENKEL**

Executive Secretary

Convention on the Conservation of Migratory Species of Wild Animals

CMS Secretariat, Platz der Vereinten Nationen 1

53113 Bonn, Germany

Email: [cms.secretariat@cms.int](mailto:cms.secretariat@cms.int), [marco.barbbieri@un.org](mailto:marco.barbbieri@un.org)

Fax: (49 228) 815-2449

Dear **Ms. Fraenkel**,

This refers to the CMS Notification 2021/00 seeking nominations for suitable candidates for the COP-appointed Councillor in the area of Invasive Alien Species.

In line with this, we would like to nominate Dr. Christine Marie V. Casal as Councillor for the intercessional period between COP13 and COP14. Dr. Casal is an expert on aquatic alien species. Attached is her CV for your reference.

Thank you.

Very truly yours,

  
**AMELITA D.J. ORTIZ**

Assistant Director

Officer-In-Charge, Office of the Director



Republic of the Philippines  
Department of Environment and Natural Resources  
BIODIVERSITY MANAGEMENT BUREAU



**BMB202104014**



United Nations Decade on Biodiversity

## Curriculum Vitae

### Christine Marie V. Casal, PhD

#### 1. EDUCATION

| Institution   | Major Area  | Degree/Date  |
|---|---|--|
| Graduate School,<br>University of the<br>Philippines Los Baños              | Aquatic environments<br>(freshwater, invasive species,<br>resource economics) | Ph.D. Environmental Science<br>Year graduated 2007     |
| Graduate School,<br>University of the<br>Philippines Los Baños              | Cytogenetics, Insect<br>resistance, Entomology<br>(cognate)                   | M.Sc. Genetics<br>Year graduated 1995                  |
| College of Arts and<br>Sciences, University of<br>the Philippines Los Baños | Genetics (minor Entomology)   | B.Sc. Biology Major in Genetics<br>Year graduated 1984 |
| Philippine Science High<br>School, Diliman, Q.C.                            | High School   | High School<br>Year graduated: 1980                    |

#### 2. EMPLOYMENT HISTORY

| Institution  | Position  | Dates                |
|--|---|----------------------|
| School of Environmental Science<br>and Management (SESAM)<br>University of the Philippines | Project Officer   | March 2019 - present |
|  | Adjunct Professor (2015-<br>present)  |                      |
| FishBase Information and<br>Research Group, Inc. (FIN)                                     | Research Associate<br>Project Leader – SMARTSeas Project<br>(FIN component) (2015-2017) | 2011-April 2018      |
| WorldFish Center   | Research Assistant to<br>Research Analyst   | 1995 – 2010          |
| Genetics Laboratory<br>Institute of Biological Sciences<br>University of the Philippines   | Research Assistant to<br>University Research Associate                                  | 1985-1994            |

#### 3. AWARDS/HONORS/SCHOLARSHIPS/MEMBERSHIPS

Philippine Aquatic Red List Committee (under Bureau of Fisheries and  
Aquatic Resources of the Philippines - current)

IUCN SSC ISSG (Invasive Species Specialist Group) - current

IUCN/World Commission on Protected Areas

Adjunct Professor at the School for Environmental Science and Management, UP Los  
Baños - current

2012 Outstanding Alumni School of Environmental Science and Management, University  
of the Philippines Los Banos

Served as reviewer of journal papers

Gamma Sigma Delta Honor Society

2004 CGIAR Outstanding Scientific Support Team  
Team Player Award – ICLARM 1999  
Philippine Science High School  
(Department of Science and Technology, Philippine Government scholarship) (1976-1980)

#### **4. PAPERS PRESENTED**

- Casal, C.M.V.** 2018. Status and Trends in Coastal Biodiversity. SGP 5 National Biodiversity Conference 2018: 'Realizing a Stronger community-based biodiversity conservation" 24-27 July 2018. Timberland Sports and Nature Club, Rizal.
- Casal, C.M.V. 2016-2017.** Several project presentations. USAID-GEF-funded project on SMARTSEAS (Marine Key Biodiversity Areas) in the Philippines (Quezon City; Southern Palawan; Cebu City; Surigao and Davao City).
- Casal, C.M.V., A.Torres, K. Reyes, E. Capuli and R. Atanacio.** 2016. Fishes in the ASEAN freshwater ecosystems: Status, Data Gaps and Collaboration Needs. 1st Philippine Symposium on Freshwater Biodiversity and Ecosystems. UST, Manila.
- Casal, C.M.V.** 2016. FishBase Products and Tools. ASEAN Conference on Biodiversity, Bangkok, 15-19 February 2016. Bangkok, Thailand.
- Casal, C.M.V.** 2016. ASEAN Species in FishBase. 7<sup>th</sup> meeting of the Asia-Pacific Biodiversity Observation. 19 February 2016. Bangkok, Thailand.
- Casal, C.M.V.** 2015. The Ornamental Fish Industry: Potential Pathway of Invasive Fishes. 2<sup>nd</sup> National Forum on Invasive Fishes. 26-27 May 2015. Punta de Fabian, Baras, Rizal.
- Casal, C.M.V.** 2014. Citizen Science Science as a Tool Towards IAS Containment. National Training on Capability Building in Inland Resource Management. 12-15 May 2014. BFAR-NIFTC. Tanay, Rizal.
- Casal, C.M.V.** 2014. Using FishBase and AquaMaps to predict IAS Establishment, Species Ranges and Risk Assessment. Integration of biodiversity data recording and Information management systems for environment sustainability: a call for EU ASEAN collaboration. 21-23 January 2014. Thailand Science Park. Bangkok, Thailand.
- Casal, C.M.V.** 2013. Using FishBase for Invasive Species Risk Assessment. FishBase Symposium 2013 - Invasive Species. 21 October 2013. Stora Hörsalen (Main Auditorium), Swedish Museum of Natural History, Frescativägen 40, Stockholm, Sweden.
- Casal, C.M.V., K.R. Reyes, M.L.D. Palomares, N.Bailly and R.Froese.** 2011. Predicting species distribution using FishBase, SeaLifeBase and AquaMaps. International Workshop on Advancing databases for global biodiversity assessments. In association with the 25<sup>th</sup> International Congress on Conservation Biology (ICCB). University of Auckland, New Zealand. 4 December 2011.
- Casal, C.M.V.** 2010. Several project presentations. Project workshop of the ACB Project: Hotspots of marine biodiversity in the Southeast Asian Seas: Mapping current location and climate change impacts. 18-19 March 2010. Khush Hall, IRRI, Los Baños, Laguna
- Casal, C.M.V., A.G. Torres and N. Bailly.** 2009. Use of FishBase and SeaLifeBase for biodiversity conservation. 2<sup>nd</sup> Bio-Asia Regional Conference, France Bio-Asia Scheme. November 25 - 28, 2009. Keelung, Taiwan.

- Casal, C.M.V.** 2009. Invasive alien fishes in freshwater ecosystems in the Philippines. Biological Diversity Day at PAWB. May 22, 2009, Aguila Hall, Visitors Center, PAWB, Quezon City.
- Casal, C.M.V.** 2009. Invasive species and their impact to biodiversity and conservation. 2<sup>nd</sup> National Training Course on Freshwater Fish Identification and Conservation, Los Baños, Laguna, Philippines, 20-25 April 2009.
- Torres, A.G., N. Bailly, E. Capuli and **C.V. Casal**. 2008. FishBase for Africa: Progress and tools. Paper presented at the 4<sup>th</sup> International Conference of the Pan African Fish and Fisheries Association. Addis Ababa, Ethiopia, 22-26 September 2008. p. 85 (Abstract only).
- Casal, C.M.V.** 2007. "Pathways, biological characteristics, establishment and invasiveness of alien fish species in Southeast Asia:" ADSS. 4 December 2007. Los Baños, Laguna, Philippines.
- Casal, C.M.V.**, R. Froese, S.M. Luna, N. Bailly and E. Agbayani. 2007. "The Invasiveness page in FishBase: Hints on biological invasions from FishBase". 24-26 October 2007. Iloilo City, Philippines.
- Casal, C.M.V.** 2007. "Alien fish species in Southeast Asia: pathways, biological characteristics, establishment and invasiveness". International Conference on Aquatic Invasive Species. 23-27 September 2007. Nijmegen, The Netherlands.
- Casal, C.M.V.** 2007. "Ballast water fishes". National Stakeholder Seminar and Consultation Meeting on Ballast Water Management Convention. 13-14 June 2007. RichMonde Hotel, Manila, Philippines (Powerpoint presentation).
- Casal, C.M.V.**, S. Luna, R. Froese, N. Bailly, R. Atanacio and E. Agbayani. 2006. "Alien fish species in the Philippines: pathways, biological characteristics, establishment and invasiveness". Conference on Invasive Alien Species in the Philippines and their Impacts to Biodiversity. 26-28 July 2006. Marikina Hotel. Marikina City, Philippines
- Casal, C.M.V.** and R. Froese. 2004. "Species Invasiveness and FishBase" 13th International Conference on Aquatic Invasive Species, September 20 to 24, 2004, Ennis, County Clare, Ireland
- Casal, C.M.V.** 2004. "Towards building a risk assessment tool for species invasiveness." Proceedings of the Workshop on Building Capacity to Combat Impacts of Aquatic Invasive Alien Species and Associated Transboundary Pathogens in ASEAN Countries. 12-16 July 2004. Penang, Malaysia. 7 p.
- Casal, C.M.V.**, A.N. Palacio, M. Reantaso, A. Ponniah, N.M. Husin, B. Fabres and R. Froese. 2004. "Tracking pathogens through species introductions: a database mapping approach." Proceedings of the Workshop on Building Capacity to Combat Impacts of Aquatic Invasive Alien Species and Associated Transboundary Pathogens in ASEAN Countries. 12-16 July 2004. Penang, Malaysia. 10 p.
- Casal, C.M.V.** 2004. "FishBase: towards building a tool to assess species invasiveness in a precautionary framework". 4<sup>th</sup> Regional Workshop – Global Biodiversity Forum – Southeast Asia. 21-23 June 2004. Manila, Philippines.
- Casal, C.M.V.** 2004. "Invasive species information in FishBase: Present and Future" GISIN experts meeting on a Global Invasive Species Information Network. 6-8 April 2004. Maryland, USA.
- Casal, C.M.V.** 2003. "Documenting the presence and impact of introduced freshwater fishes for aquaculture in the Philippines". 1st National Congress on Philippine Lakes, December 2003. Tagaytay City, Philippines.

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- Casal, C.M.V.** 2003. Global documentation of Fish Introduction - the growing crisis and recommendations for action. 12th International Conference on Aquatic Invasive Species, June 9 to 12, 2003, Windsor, Ontario.
- Pullin, R.S.V., **C.M.V. Casal** and R. Brummett. 1998. "Fish Genetic Resources of Africa". African Fish and Fisheries - Diversity and Utilization. September 1998, Grahamstown, South Africa.
- Bartley, D.M. and **C.M.V. Casal**. 1998. "Impact of introductions on biodiversity". ACP-EU Fisheries Research Initiative. Conference on Sustainable Use of Aquatic Biodiversity: Data, Tools and Cooperation. , 3-5 September 1998. Lisbon, Portugal.
- Casal, C.M.V.**, D. Bartley, R. Froese, P. Sa-a and M.L.D. Palomares; 1997. "Documenting the status of freshwater fish introductions in Oceania". 5<sup>th</sup> Indo-Pacific Fish Conference. 3-8 November 1997, Nouméa.
- Palomares, M.L.D. and **C.M.V. Casal**. 1997. "A database approach to illustrate genetic trends in fishes" Genetics and Aquaculture in Africa. 1-4 April 1997. Abidjan, Cote d'Ivoire.
- Pullin, R.S.V., Palomares, M.L., **Casal, C.M.V.**, Dey, M.M. and D. Pauly. "Environmental impacts of tilapias" Fourth International Symposium on Tilapia in Aquaculture, November 9-12, 1997. Orlando, Florida.

## **5. Meetings/Symposia/Workshops Attended**

- Philippine Aquatic Red List Committee (PARLC) National Assessment Workshop. 10-14 December 2018. Ortigas Center, Mandaluyong City (participant)
- Philippine Aquatic Red List Committee (PARLC) National Workshop. 30 July – 4 August 2018. Dumaguete, Negros (participant)
- SGP 5 National Biodiversity Conference 2018: 'Realizing a Stronger community-based biodiversity conservation' 24-27 July 2018. Timberland Sports and Nature Club, Rizal (Plenary paper presenter).
- 1st Philippine Symposium on Freshwater Biodiversity and Ecosystems. 7-10 June 2016. UST, Manila (paper presenter).
- ASEAN Conference on Biodiversity, Bangkok, 15-19 February 2016. Bangkok, Thailand (paper presenter).
- Meeting of the Asia-Pacific Biodiversity Observation. 19 February 2016. Bangkok, Thailand. (invited participant)
- 2<sup>nd</sup> National Forum on Invasive Fishes. 26-27 May 2015. Punta de Fabian, Baras, Rizal, Philippines (invited speaker).
- Workshop on Supporting Regional Assessments in the Context of the Intergovernmental Platform on Biodiversity and Ecosystem Services. 8-13 November 2014. Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences. Beijing, China (participant).
- Training Course/Workshop on Eco-Climatic Modelling using (CLIMEX) for Invasive Species. 17-19 October 2014. The Everly Hotel, Putrajaya, Malaysia (participant).



Training Course/Workshop on Economic Analyses of Invasive Species. 13-16 October 2014. The Everly Hotel, Putrajaya, Malaysia (participant).

SUSTAIN EU-ASEAN. Media Training. 21 August 2014. CAPSA, Jalan Merdaka 145, Bogor 16111, Indonesia (participant).

SUSTAIN-EU-ASEAN. Urban climate action and resource efficiency in Southeast Asia: thematic gaps and project financing. 20 August 2014. IPB International Convention Center, Botani Square Building, Bogor, Indonesia (resource speaker)

SUSTAIN EU-ASEAN. Cluster Meeting: Organic and non-organic resources and climate action and cities. 19 August 2014. CAPSA, Jalan Merdaka 145, Bogor 16111, Indonesia. (resource speaker)

The Biodiversity Finance Initiative (BIOFIN) Costing the NBSAP. August 2014. Bagiuo Country Club, Bagiuo City (resource person).

Round Table Discussion on "The Impacts of Introduced Freshwater Fishes In the Philippines". National Academy of Science and Technology (NAST), Trader's Hotel, Roxas Blvd, Manila (discussant-reactor to Dr. Guerrero's presentation).

National Training on Capability Building in Inland Resource Management. 12-15 May 2014. BFAR-NIFTC. Tanay, Rizal (resource speaker).

The Biodiversity Finance Initiative (BIOFIN) Transforming Policy and Finance Framework to Increase Biodiversity Investment. Workshop on Policy and Institutional Review. 8 May 2014. Executive Hall, Mabini, Malacañang Compound, San Miguel Manila (participant).

23<sup>rd</sup> Annual Philippine Biodiversity Symposium "Forging Partnerships for Understanding and Conserving Philippine Biodiversity. 1-4 April 2014. University of San Carlos Talamban Campus, Cebu City. Philippines (participant).

GEF IW: LEARN Information and Communications Technology Workshop in Spatial Data Management for Aisa and the Pacific. 17-20 March 2014. ADB, Manila, Philippines (resource person).

Workshop on Action Plan to Prevent Species Extinction: Annex to Philippine Biodiversity and Action Plan (PBSAP) 2025. 13-14 March 2014. Torre de Venecia, Quezon City, Philippines (facilitator freshwater group).

ILBM (Integrated Lake Basin Management)-Heartware Seminar and Workshop. 3-5 March 2014. Casa San Pablo, San Pablo City, Philippines (participant).

Integration of biodiversity data recording and information management systems for environment sustainability: a call for EU ASEAN collaboration. 21-23 January 2014. Thailand Science Park. Bangkok, Thailand (invited speaker).

NBSAP Regional Consultations. 2013. Luzon, Visayas, Mindanao, Philippines. (Lead Expert Discussant).

FishBase Symposium 2013 - Invasive Species. Stora Hörsalen (Main Auditorium), Swedish Museum of Natural History, Frescativägen 40, Stockholm, Sweden. 21 October 2013 (invited speaker).

The Global Invasive Alien Species Information Partnership Technical Workshop. Convention on Biological Diversity. Natural History Museum, London, UK. 14-16 May 2013 (invited participant).

Organizational Workshop for the Global Invasive Alien Species Information Partnership. Convention on Biological Diversity. Natural History Museum, London, UK. 9-10 July 2012 (participant).

International Workshop on Advancing databases for global biodiversity assessments. In association with the 25<sup>th</sup> International Congress on Conservation Biology (ICCB). University of Auckland, New Zealand. 4 December 2011 (participant).

Informatics Expert Meeting on Invasive Alien Species. Global Biodiversity Information Facility. Copenhagen, Denmark. 5-6 September 2011 (participant).

Ad Hoc Technical Expert Group Meeting on Addressing the Risks Associated with the Introduction of Alien Species as Pets, Aquarium and Terrarium Species, and as Live Bait and Live Food. Convention on Biological Diversity. Geneva, Switzerland, 16-18 February 2011 (participant).

Workshop on the CTI NPOA Implementation Plan Preparation. Lancaster Hotel, Mandaluyong City, 26-27 August 2010 (participant).

3<sup>rd</sup> National PES Conference-Workshop. "PES for Climate Change Adaptation and Mitigation" Lancaster Hotel, Mandaluyong City. 12-13 August 2010 (participant).

Project workshop of the ACB Project: Hotspots of marine biodiversity in the Southeast Asian Seas: Mapping current location and climate change impacts. 18-19 March 2010. Khush Hall, IRRI, Los Baños, Laguna (resource person/organizer)

Drafting of the National Report to the CBD in PAWB – ATENEO meeting. Quezon City. Series of meetings – Luzon and National from 2009 to 2010. (resource person).

2<sup>nd</sup> Bio-Asia Regional Conference, France Bio-Asia Scheme. Keelung, Taiwan. November 25 - 28, 2009 (paper presenter).

3<sup>rd</sup> Global Invasive Species Information Network (GISIN) Data Standards Workshop, Elmira College in Elmira, New York, USA, 25-30 June 2009 (Resource person).

2<sup>nd</sup> National Training Course on Freshwater Fish Identification and Conservation, Los Baños, Laguna, Philippines, 20-25 April 2009 (Trainor/Resource person/Organizer).

Towards Disaggregated Fish Statistics in the Philippines, BAS, Quezon City, 24-25 April 2008. (organizer).

GEF/LME Regional Training Workshop on the Use of Ecopath with Ecosim (EwE) for Ecosystem-Base Management of Fisheries, IRRI, College-Los Baños, Laguna, Philippines, 31 January – 5 February 2008 (participant).

National Workshop on Environmental Protection: "Advocacy by Women in Maritime". 5-9 November 2007. Manila Hotel, Philippines (participant).

National Training Course on Freshwater Fish Identification, University of the Philippines, Los Baños, Laguna, Philippines, 18-22 October 2007 (Organizer/Participant).

15<sup>th</sup> International Conference on Aquatic Invasive Species. 23-27 September 2007. Nijmegen, The Netherlands. (Paper presenter)

Sulu-Sulawesi Seascape Congress, June 20-22, 2007 The Richmonde Hotel, Manila, Philippines (Poster presenter)

National Stakeholder Seminar and Consultation Meeting on Ballast Water Management Convention. 13-14 June 2007. RichMonde Hotel, Manila, Philippines (Powerpoint presentation).

Performance Management Workshop, Harrar Hall, IRRI, June 6-7, 2007 (participant)

HR4U Training, Research Training Center, IRRI, April 27, 2007 (participant)

Global Trends in Fisheries. Rainer Froese SEARCA Seminar Series, UPLB, February 13, 2007.

International Conference on the Environmental Management of Aquaculture: Mitigating impact from Aquaculture in the Philippines. Round table discussion on the Environmental Management of Aquaculture. 8 December 2006. Marine Science Institute, UP Diliman, Quezon City, Philippines (participant).

International Conference on the Environmental Management of Aquaculture: Mitigating impact from Aquaculture in the Philippines. 6-7 December 2006. Marine Science Institute, UP Diliman, Quezon City, Philippines (Poster presenter).

Invasive Alien Species in the Philippines: Status, Challenges and Directions. Conference on Invasive Alien Species in the Philippines and their Impacts to Biodiversity. 26-28 July 2006. Marikina Hotel. Marikina City, Philippines (Convenor and paper presenter).

2006 GISIN Invasive Species Profile Schema Experts Meeting. 20-24 February 2006, Agadir, Morocco. Experts Meeting to Discuss an Invasive Species Profile Schema (participant).

Microsoft Access Advanced Training Course. IRRI, Los Baños, Laguna. 19-23 September 2005. (participant)

Microsoft Word Advanced Training Course. IRRI, Los Baños, Laguna. 26-27 May 2005. (participant)

Microsoft Excel Advanced Training Course. IRRI, Los Baños, Laguna. 6 May 2005. (participant)

Skills and Team Development Workshop in Project and Proposal Development and Marketing: Building Partner Capacity to Finance Integrated Coastal Management in Southeast Asia. IRRI Complex, Los Baños, Laguna. 26-28 April 2005. (participant)

Microsoft Access Intermediate Training Course. IRRI. Los Baños, Laguna. 20 April 2005. (participant)

13th International Conference on Aquatic Invasive Species, September 20 to 24, 2004, Ennis, County Clare, Ireland (paper presenter).

Workshop on Building Capacity to Combat Impacts of Aquatic Invasive Alien Species and Associated Transboundary Pathogens in ASEAN Countries. 12-16 July 2004. Penang, Malaysia. (paper presenter)

4<sup>th</sup> Regional Workshop – Global Biodiversity Forum – Southeast Asia. 21-23 June 2004. Manila, Philippines (paper presenter).

GISIN experts meeting on a Global Invasive Species Information Network. 6-8 April 2004. Maryland, USA (resource speaker).

Public-Private Partnerships in Tilapia Genetics and Dissemination of Research Outputs: Philippine Experience. 21-23 January 2004. Days Hotel, Tagaytay City, Philippines (Rapporteur).

1st National Congress on Philippine Lakes, December 2003. Tagaytay City, Philippines (paper presenter).

Regional Workshop on Building Capacity for Developing National Aquatic Information Systems, Laguna 25-28 November 2003, WorldFish Center Philippine Office Los Baños Laguna, Philippines (Resource speaker)

National Workshop on applying FishBase in the Philippines, Los Baños, Laguna, 10-11 November 2003 (resource speaker).

12th International Conference on Aquatic Invasive Species, June 9 to 12, 2003, Windsor, Ontario (paper presenter).

BFAR-WorldFish Center Workshop: Identifying Research Areas for Collaboration. 28 May 2003, Los Baños, Laguna (Rapporteur)

International workshop on information systems for policy and technical support in fisheries and aquaculture, Los Baños, Laguna, 5-7 June 2000. (Organizational support)

Biodiversity and Sustainable Use of Fish in the Coastal Zone. May 1999. Achimota, Ghana. (Rapporteur)

ACP-EU Fisheries Research Initiative. Conference on Sustainable Use of Aquatic Biodiversity: Data, Tools and Cooperation. 3-5 September 1998, Lisbon, Portugal. (Rapporteur, Organization of the workshop)

Towards policies for conservation and sustainable use of aquatic genetic resources. 14-18 April 1998, Bellagio, Como, North Italy. (Rapporteur, Organization of the workshop)

ACP-EU 4th Training Course on Fisheries and Biodiversity Management, August 23 to 3 September 1999, Dakar, Senegal (Organizational support).

Microsoft Outlook – ICLARM c/o MRJacinto and Partners, Ltd. 1999 (participant)

Characterization of Ghanaian tilapia Genetic Resources for use in Fisheries and Aquaculture. 1996. Achimota, Ghana (Rapporteur, Organization of the workshop)

Consultation on Fish Genetic Resources. 11-13 December 1995, Rome, Italy. (Rapporteur, Organization of the workshop)

Western Central Pacific (WCP) Living Marine Resources Identification Guide Workshop, 1-10 October 1995. Marine Science Institute. University of the Philippines, Diliman, Quezon City, Philippines (Organizational support).

## **6. PUBLICATIONS**

**Casal, C.M.V.**, J.C. Espedido and A. Palma. 2017. Golden Apple Snail use in small-scale aquaculture in the Philippines. pp. 387-398 in: Joshi, R.C., R. Cowie and L.S. Sebastian (eds)

Biology and Management of invasive Apple Snails. Philippine Rice Research Institute, Science City of Muñoz, Nueva Ecija, Philippines. 588 p.

- Dawson, W., D. Moser, M. van Kleunen, H. Kreft, J. Pergl, P. Pysek, P. Weigelt, M. Winter, B. Lenzner, T.M. Blackburn, E. Dyer, P. Cassey, S-L. Scrivens, E.P. Economo, B. Guenard, C. Capinha, H. Seebens, P. Diaz, W. Nentwig, E. Garcia-Berthou, **C.Casal**, N. Mandrak, P. Fuller and F. Essl. 2016. Global hotspots and correlates of of alien species across taxonomic groups. *Nature Ecology and Evolution*. 1, 0186 (2017) | DOI: 10.1038/s41559-017-0186
- Cabral, R., Cruz-Trinidad, A., Geronimo, R., Napitululu, L., Lokani, P., Boso, D., **Casal, C.M.V.**, Fatan, N.A. and P. Aliño. 2013. Crisis sentinel indicators: Averting a potential meltdown in the Coral Triangle. *Marine Policy* 39: 241–247.
- Casal, C.M.V.**, S. Luna, R. Froese, N. Bailly, R. Atanacio and E. Agbayani. 2008. Alien fish species in the Philippines: pathways, biological characteristics, establishment and invasiveness. *Journal of Environmental Science and Management* 10(1):1-9 2008.
- Casal, C.M.V.**, A. Torres, E. Capuli and R. Atanacio. 2007. FishBase as a tool to assist in identifying native species with potential for aquaculture. Submitted to Science Diliman.
- Castillo, L.V. and **C.M.V. Casal**. 2006. Golden Apple Snail utilization in small-scale aquaculture in the Philippines. pp. 475-482 in: Joshi, R.C. and L.S. Sebastian (eds) *Global advances in ecology and management of golden apple snails*. Philippine Rice Research Institute, Science City of Muñoz, Nueva Ecija, Philippines. 588 p.
- Casal, C.M.V.** 2006. Global documentation of Fish Introduction - the growing crisis and recommendations for action. *Biological Invasions*. 8: 3-11.
- Casal, C.M.V.** 2005. Invasive Species in FishBase. *Aquatic Invaders Digest for Vol. 16(2)*: 5-9 (April-June, 2005).
- Casal, C.M.V.**, D.C. Bobori and K.I. Stergiou. 2005. Introduced fish species in inland waters of the Balkan countries: An approach using FishBase. p. 346-349. *In Proceedings of the 12th Pan-Hellenic Conference of Ichthyologists, Drama, 13-16 October 2005*.
- Casal, C.M.V.** 2005. Towards building a risk assessment tool for species invasiveness. *Proceedings of the Workshop on Building Capacity to Combat Impacts of Aquatic Invasive Alien Species and Associated Transboundary Pathogens in ASEAN Countries*. 12-16 July 2004. Penang, Malaysia. 7 p.
- Casal, C.M.V.**, A.N. Palacio, M. Reantaso, A. Ponniah, N.M. Husin, B. Fabres and R. Froese. 2005. Tracking pathogens through species introductions: a database mapping approach. *Proceedings of the Workshop on Building Capacity to Combat Impacts of Aquatic Invasive Alien Species and Associated Transboundary Pathogens in ASEAN Countries*. 12-16 July 2004. Penang, Malaysia. 10 p.
- Casal, C.M.V.** 2004. Documenting the presence and impact of introduced freshwater fishes for aquaculture in the Philippines. *Proceedings of the 1st National Congress on Philippine Lakes*, December 2003. Tagaytay City, Philippines.
- Casal, C.M.V.** and R. Froese. 2004. Species Invasiveness and FishBase. p. 142. *Abstracts of the 13th International Conference on Aquatic Invasive Species, September 20 to 24, 2004, Ennis, County Clare, Ireland*. 282 p.

- Abban, E.K., **C.M.V. Casal**, P. Dugan and T.M. Falk, Editors. 2004. Biodiversity, Management and Utilization of West African Fishes. WorldFish Center Conference Proceedings 69. 71 p.
- Pullin, R.S.V., **C.M.V. Casal** and R. Brummett. 2001. Fish Genetic Resources of Africa, pp. 60-74. In P.H. Skelton and G.G. Teugels, Editors. African Fish and Fisheries - Diversity and Utilization. Ann. Sci. Zool. 288, 105 p.
- Various contributions in Froese, R. and D. Pauly. (Eds.) 2000. FishBase 2000: Concepts, design and data sources. ICLARM, Manila, Philippines. 293 p.
- Casal, C.M.V.** 2000. The data in FishBase, p. 61-62. In E.K. Abban, C.M.V. Casal, T.M. Falk and R.S.V. Pullin, Editors. 2000. Biodiversity and sustainable use of fish in the coastal zone. ICLARM Conf. Proc. 63, 71 p.
- Abban, E.K., **C.M.V. Casal**, T.M. Falk and R.S.V. Pullin, Editors. 2000. Biodiversity and sustainable use of fish in the coastal zone. ICLARM Conf. Proc. 63, 71 p.
- Casal, C.M.V.**, D. Bartley, R. Froese, P. Sa-a and M.L.D. Palomares. 1999. Documenting the status of freshwater fish introductions in Oceania. p. 385-392. In B. Séret and J.-Y. Sire (eds.). Proceedings of the 5<sup>th</sup> Indo-Pacific Fish Conference (Nouméa, 3-8 November 1997). Paris: Société Française d'Ichtyologie and Institut de Recherche pour le Développement, 888 p.
- Bartley, D.M. and **C.M.V. Casal**. 1999. Impact of introductions on biodiversity, CD-ROM entry In R.S.V. Pullin, R.Froese and C.M.V. Casal (eds.). ACP-EU Fisheries Research Initiative. Proceedings of the Conference on Sustainable Use of Aquatic Biodiversity: Data, Tools and Cooperation. Lisbon, Portugal, 3-5 September 1998, ACP-EU Fish. Res. Rep. 6. 71 p.
- Pullin, R.S.V., R. Froese and **C.M.V. Casal**, Editors. 1999. ACP-EU Fisheries Research Initiative. Proceedings of the Conference on Sustainable Use of Aquatic Biodiversity: Data, Tools and Cooperation. Lisbon, Portugal, 3-5 September 1998, ACP-EU Fish. Res. Rep. 6. 71 p.
- Bartley, D.M. and **C.M.V. Casal**. 1998. Impacts of introductions on the conservation and sustainable use of aquatic biodiversity. FAO Aquaculture Newsletter. December 1998 – No. 20: 15-19.
- Palomares, M.L.D. and **C.M.V. Casal**. 1998. A database approach to illustrate genetic trends in fishes, p. 105-114. In: J.F. Agnès (Scientific Ed.) Genetics and Aquaculture in Africa. Actes du colloque Génétique et aquaculture en Afrique Abidjan, 1er-4 avril 1997. Éditions de l'Orstom, collection Colloques et séminaires, Institut Français de Recherche Scientifique pour le Développement en Coopération, Paris, 326 p.
- Pullin, R.S.V., **C.M.V. Casal**, E.D. Abban and T.M. Falk, Editors. 1997. Characterization of Ghanaian tilapia genetic resources for use in fisheries and aquaculture. ICLARM Conf. Proc. 52. 58 p.
- Pullin, R.S.V., Palomares, M.L., **Casal, C.M.V.**, Dey, M.M. and D. Pauly, 1997. Environmental impacts of tilapias, p. 554-570. In K. Fitzsimmons, (ed.) Tilapia Aquaculture. Proceedings from the Fourth International Symposium on Tilapia in Aquaculture, Volume 2. Northeast Regional Agricultural Engineering Service (NRAES) Cooperative Extension, Ithaca, New York. 808 p.
- Pullin, R.S.V. and **C.M.V. Casal**, Editors. 1996. Consultation on fish genetic resources. ICLARM Conf. Proc. 51, 61 p.
- Barrion, A.A., D.M. Amalin, **C.V. Casal** and V.M. Montoya. 1994. Spermatogenesis of the sweet potato weevil *Cylas formicarius* Fab. Asia Life Sciences 3(1): 69-72.
- Barrion, A.A., D.M. Amalin, **C.V. Casal**, V.M. Montoya and P.R. de la Cruz. 1993. Cells and chromosomes of the sweet potato weevil *Cylas formicarius* Fab. sampled from Laguna and Ilocos Norte. Phil. Ent. 9(2): 168-174.
- Divinagracia, D., A.A. Barrion, **C.V. Casal** and P.R. de la Cruz. 1992. Cytogenetics of the waterstrider, *Rheumatogonus luzonicus* (Kirkaldy). Phil. Ent. 8(6): 1259-1264.

- Almasan, A., A.A. Barrion, **C.V. Casal** and P.R. de la Cruz. 1991. Karyotype analysis of sabila, *Aloe barbadensis* Mill. (Liliales: Liliaceae). Phil. Agri. 74(2):261-265.
- De Padua, D.S., A.A. Barrion, **C.V. Casal** and P.R. de la Cruz. 1991. Karyomorphology of chichirica *Catharanthus roseus* (L.) Don. Phil. J. Sci. 121(3):299-304.
- Barrion, A.A., **C.V. Casal** and D.M. Amalin. 1989. Morphology and cytology of the lynx spider *Oxyopes javanus* Thorell. Phil. J. Sci. 118(3):229-238.
- Barrion, A.A., **C.V. Casal** and L.D. Taylo. 1989. Seasonal fluctuations and meiotic indices of psyllid (*Heteropsylla cubana* Crawford) in giant and native varieties of ipil-ipil (*Leucaena leucocephala* (Lam.) de Wit) in the in the Philippines. Leucaena Res. Rep.
- Barrion, A.A., **C.V. Casal**, L.D. Taylo and D.M. Amalin. 1987. Araneidism by two orb-weaving spiders (Araneae: Araneidae) in the Philippines. Phil. J. Sci. 116(2):245-254.
- Barrion, A.A., A.T. Barrion, **C.V. Casal**, L.D. Taylo and D.M. Amalin. 1987. Most common lynx spiders genus *Oxyopes* Thorell (Araneae: Oxyopidae) in the Philippines. Natl. and Appl. Sci. Bull. 13:35-46.
- Barrion, A.A., A.T. Barrion, **C.V. Casal**, L.D. Taylo and D.M. Amalin. 1986. Orb-weaving spiders genus *Neoscona* (Araneae: Araneidae) in the Philippines. Phil. J. Sci. 69(3):385-409.

## **7. Posters presented**

- Torres, A.G., E.C. Capuli, A.G. Sampang-Reyes, N. Bailly and **C.M.V. Casal**. 2014. Documenting fish species in selected major Philippine Lakes. 23<sup>rd</sup> Annual Philippine Biodiversity Symposium "Forging Partnerships for Understanding and Conserving Philippine Biodiversity. April 1-4, 2014. University of San Carlos Talamban Campus, Cebu City. Philippines.
- Casal, C.M.V.** 2007. Pathways and Establishment Predictions of Fish Introductions to the Philippines. Sulu-Sulawesi Seascape Congress, June 20-22, 2007 The Richmonde Hotel, Manila, Philippines
- Casal, C.M.V.**, R. Froese, E. Capuli, A. Torres and R. Atanacio. 2006. FishBase as a tool to assist in identifying native species with potential for aquaculture. International Conference on the Environmental Management of Aquaculture: Mitigating impact from Aquaculture in the Philippines. 6-7 December 2006. Marine Science Institute, UP Diliman, Quezon City, Philippines.

**ATTACHMENT 3**

**NOMINATION OF DR TATIANI ELISA CHAPLA**  
*(Submitted by the Government of Brazil)*



## Marco Barbieri

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**From:** Igor Andrade Vidal Barbosa <igor.vidal@itamaraty.gov.br>  
**Sent:** Friday, 19 February 2021 13:57  
**To:** cms.secretariat@cms.int [CMS]  
**Cc:** Marco Barbieri; Brazil - Ms. Luciana Melchert (dema1@itamaraty.gov.br) [ITAMARATY GOV]; tatiani.chapla@mma.gov.br; Hugo Suarez [MMA GOV]  
**Subject:** Notification 2021/004. COP-APPOINTED COUNCILLOR SUBJECT AREA OF INVASIVE SPECIES. Dr. Dr Tatiani Chapla  
**Attachments:** Statement Justification Tatiani Chapla.docx; Declaracao\_0685898\_Declaration\_Tatiani\_Chapla.pdf; Curriculo\_0685887\_Curriculum\_Vitae\_for\_Tatiani\_Chapla.pdf

Dear members of the CMS Staff,

I hope you are all doing well. In answer to Notification 2021/004, we would like to resubmit the nomination of Dr Tatiani Chapla for the COP Appointed Councillor Subject Area of Invasive Species. Her nomination had already been presented during COP 13 in Gandhinagar.

The necessary documents for nomination are attached to this message and we believe they show that Dr. Chapla is willing and fully capable of exercising this important function.

Best regards,

Igor Vidal  
Ministry of Foreign Affairs of Brazil

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Esta mensagem foi verificada pelas ferramentas de detecção de ataques do Ministério e nenhuma ameaça cibernética foi encontrada. Não obstante, recomenda-se cautela, especialmente se solicitar dados pessoais e senhas ou se contiver anexos.

## JUSTIFICATION STATEMENT

To: Standing Committee of the Convention on Conservation of Migratory Species of Wild Animals

Considering the Notification 2021/01, which aims to seek nominations from Parties for the new COP-Appointed Councilor Subject Areas, we are proud to indicate the candidature of Dr Tatiani Chapla for the theme of invasive species.

Dr Tatiani Chapla has a doctoral degree in environmental science from the State University of Maringa, Brazil. She developed ecological research on the impacts and management of invasive plant species. Since 2012, she holds a permanent position as an Environmental Analyst in the Ministry of the Environment of Brazil, acting as the technical focal point for invasive species. She has played a central role in the revision and implementation of the National Strategy on Invasive Species. She has also provided valuable advice and technical guidance for definition and implementation of management activities for diseases, weeds, feral animals, marine and freshwater pests. She has been leading the development of the national early detection and rapid response system for invasive species with the aim to prevent further impacts on biodiversity. Regarding international agreements, we would highlight her support for the Convention on Biological Diversity related activities, including her attendance in the Expert Workshop on Invasive Alien Species in Preparation for the 22nd Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, as well her active participation in the online discussion forum convened to subsidize the Ad Hoc Technical Expert Group on Invasive Alien Species accordingly to COP Decision 14/11. Furthermore, Dr Tatiani Chapla was awarded by the Australian government with a fellowship under the Endeavour Leadership Program. She spent six months in Australia presenting Brazilian initiatives on invasive species and learning about Australian biosecurity and biodiversity conservation policies and initiatives. Finally, we would like to state that Dr Tatiani Chapla delivers an outstanding performance in her duties, demonstrating technical excellence and high commitment.

In the view of the above details, we would be grateful if you could consider the nomination of Dr Tatiani Chapla. We are sure she would greatly contribute to the CMS bodies in order to support invasive alien species management and ensure the conservation of migratory species.

## DECLARATION

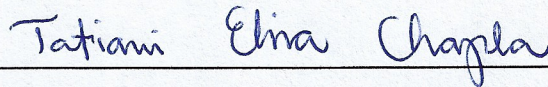
Considering the Notification 2021/001, which aims to seek nominations from Parties for the COP-Appointed Councilor Subjects Areas, and the proposed nomination by the Brazilian Focal Point for the theme of invasive species, I would like to state my interest and availability to accept the appointment, if selected.

I have been working with invasive alien species management for 12 years, including a background in ecological research and as a policy officer at the Ministry of the Environment of Brazil. During my career, I have the opportunity to work with a variety of taxonomic groups and environments (freshwater, terrestrial and marine). This implies in dealing with different sectors and multiple problems, including animal pests and diseases control, wildlife traffic, hunting regulations, among others.

Invasive species are an urgent matter and migratory species are particularly susceptible. I would be honored to work in partnership with the CMS – Convention of Migratory Species of Wild Animals to address the impacts caused by these species on migratory species.

Finally, I would like to express readiness to take part in the COP-Appointed Councilor Subject Areas, if selected for the theme of invasive species.

Brasilia, 11 February 2021



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Tatiani Elisa Chapla

# Curriculum Vitae for Tatiani Chapla

## PERSONAL INFORMATION

**Full name:** Tatiani Elisa Chapla

**Citizenship:** Brazilian

**Date of Birth:**

**Gender:** Female

**Institutional address:**

**Telephone:**

**Email:**

## ACADEMIC QUALIFICATIONS

Doctor of Science in Ecology of Inland Water Ecosystems (2010-2014)

State University of Maringa, State of Parana, Brazil

Thesis title: Biological invasion and management of invasive guava (*Psidium guajava* L.) in the initial succession at abandoned pastures in the Upper Parana River Floodplain. Scholarship from the Coordination for the Improvement of Higher Education Personnel, Brazil

Master of Science in Ecology of Inland Water Ecosystems (2007-2009)

State University of Maringa, State of Parana, Brazil

Thesis title: Recruitment of soil seed bank components at abandoned pastures in the Upper Paraná River Floodplain, Brazil (passed with Honours)

Scholarship from the National Council for Scientific and Technological Development, Brazil

Bachelor of Education and Bachelor of Science in Biological Sciences (2002-2007)

State University of West Paraná, State of Paraná, Brazil

## ADDITIONAL QUALIFICATION

Professional Development Program on Invasive Alien Species Management (08/2018 – 12/2018)

Endeavour Executive Fellowship, Endeavour Leadership Program, Department of Education and Training, Australian Government

Host organisations: CSIRO - Commonwealth Scientific and Industrial Research Organisation, CISS – Centre for Invasive Species Solutions; and NSW DPI – New South Wales Department of Primary Industries

## CURRENT EMPLOYMENT

**Employer:** Ministry of the Environment of Brazil

**Permanent Official Position:** Environmental Analyst

**Date:** since January 2012

**Branch:** Secretariat of Biodiversity, Department of Species

**Field of responsibility:** development and implementation of public policies, regulation, strategies, programs and projects for biodiversity conservation, focused on invasive alien species management.

### **Main activities and functions**

- Responsible for the preparation and implementation of regulations, national strategies, plans and projects on invasive alien species management involving discussions and negotiation with stakeholders as industry, academia, and community;
- Developing strategies to implement, support for preparation of national reports and defining positions, answering notifications on international agreements and initiatives, including the Convention on Biological Diversity, the Sustainable Development Goals (Agenda 2030), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, the Convention on the Conservation of Migratory Species of Wild Animals, the Ramsar Convention on Wetlands of International Importance, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora;
- Attending technical meetings and online discussion forums of international bodies, such as the environment workgroup of the Southern Common Market (Mercosur), the Expert Workshop on Invasive Alien Species in Preparation for the 22nd Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, and the online discussion forum convened to subsidize the Ad Hoc Technical Expert Group on Invasive Alien Species accordingly to COP Decision 14/11;
- Fundraising activities focused on international cooperation project preparation, application, management, and implementation, especially projects funded by the Global Environment Facility;
- Member of technical advisory groups and delegated for national committees or workgroups with focus on invasive alien species management and biodiversity conservation, such as the Permanent National Committee of Wild Boar Management;
- Responsible for technical subsidies to decision making and negotiation processes, including writing technical opinions about documents and normative proposals, as laws and decrees related to or with implication for invasive alien species management and biodiversity conservation;
- Acting as a liaison officer between the Ministry of the Environment and subordinate agencies to coordinate planning and implementation of policies and actions;
- Identification of opportunities and engagement for collaboration with domestic and international partners;
- Responsible for conception and writing terms of reference, selection, and coordination of technical consultants;
- Preparation, revision and edition of technical documents and publications, such as a guide for best practices for feral pigs control ([https://www.gov.br/ibama/pt-br/assuntos/notas/2020/manejo-e-controle-de-javalis/20201217Manual\\_do\\_Javali\\_Digital.pdf](https://www.gov.br/ibama/pt-br/assuntos/notas/2020/manejo-e-controle-de-javalis/20201217Manual_do_Javali_Digital.pdf));
- Planning and coordination of events as meetings, workshops, seminars and training courses, including group facilitation.

### **Relevant work and accomplishments**

- Approval of the Brazilian red list update by the Minister of the Environment (2014; team member).

- Approval of the National Strategy for the Conservation of Threatened Species Project (PROSPECIES) by the Global Environment Facility (2015-2016; leader for the invasive alien species component and team member for the whole project);
- Approval of the proposal for training course “Course on rapid identification of invasive alien species for government regulators” under the Global Taxonomy Initiative with financial support from the Government of Japan through the Japan Biodiversity Fund (2017; co-applicant and event coordinator);
- Coordination of preparation of Invasive Species National Control Plans (2016-2018; leader for Feral Pigs and Golden Mussel, team member for Sun Coral);
- Review of the National Strategy on Invasive Alien Species and preparation of the Action Plan (2017-2018, leader of the activity);
- Promotion of a virtual technical training on risk analysis and environmental impact classification for alien taxa (EICAT scheme) in partnership with the International Union for Conservation of Nature -IUCN. This is the first EICAT course in South America and the first EICAT training as an official standard of IUCN (2020 – leader of the activity);
- Coordination of the monitoring and evaluation of the implementation of the National Strategy on Invasive Alien Species (2019-current; leader of the activity);
- Development of a national list of invasive alien species, introduction pathways analysis, protocols for early detection and rapid response, including a network of collaborators (2019-current).

#### **Positions held**

Deputy General Coordinator of Species Conservation (February 2017 to July 2018)

**Field of responsibility:** development of public policies, regulation, strategies, programs and projects for biodiversity conservation, focused on threatened species conservation and invasive alien species management.

**Main activities:** team coordination, delegation of tasks, management of stakeholders, and report to a board of directors.

#### **PROFESSIONAL MEMBERSHIPS**

- Ministry of the Environment of Brazil Employees Association (since 2013);
- Regional Council of Biology, 7th region (since 2008).

#### **RELEVANT PUBLICATIONS**

Pombo, V.B.; Coradin, L.; Silva, A.J.R.; Chapla T.E. Políticas públicas e a gestão de espécies exóticas invasoras em águas continentais brasileiras. In: Latini, A.O.; Resende, D.C.; Pombo, V.B.; Coradin, L. (Org.). Espécies exóticas invasoras de águas continentais no Brasil. Brasília-DF: Ministério do Meio Ambiente, 2016, p. 745-769.

Chapla, T.E.; Campos, J.B. Soil seed bank during succession at an abandoned pasture in the upper Paraná river-floodplain, Brazil. *Acta Scientiarum. Biological Sciences*, v. 33, p. 59-69, 2011.

Chapla, T.E.; Campos, J.B. Allelopathic evidence in exotic guava (*Psidium guajava* L.). *Brazilian Archives of Biology and Technology*, v. 53, p. 1359-1352, 2010.

## **LANGUAGES**

Portuguese: native language

English: advanced (listening, speaking, writing - C1; reading - C2);

Spanish: basic (speaking, writing), intermediate (listening, reading);

## **HOBBIES**

Studying, reading, bushwalking and camping.

## **REFEREE**

Joao Batista Campos

Executive Secretary of the Environmental Council of Parana State  
Secretariat of Environment and Water Resources of Parana State,  
Brazil

**ATTACHMENT 4**

**NOMINATION OF DR RUTH CROMIE**

*(Submitted by the Government of the United Kingdom)*



## Marco Barbieri

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**From:** Blake, Kristopher  
**Sent:** Friday, 19 February 2021 17:24  
**To:** cms.secretariat@cms.int [CMS]; Marco Barbieri  
**Cc:** Ruth Cromie; United Kingdom of Great Britain and Northern Ireland - Mr. J 3 [JNCC GOV]; Daisley, Caroline; Rendell, Jamie  
**Subject:** Nomination for CoP-appointed Councillor for Invasive Species  
**Attachments:** Ruth Cromie CV 2021.pdf; RE: CMS COP-Appointed Councillor position

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear Marco and Secretariat colleagues,

The UK would like to nominate Ruth Cromie for the CoP-appointed Councillor on Invasive Species. Ruth brings with her extensive expertise, especially on wildlife disease, which will be particularly valuable in progressing the work of the Scientific Council in this area in light of Covid-19 pandemic. Ruth has substantial academic background in the field as well as expertise working in the international sphere and with Multilateral Environmental Agreements, as demonstrated by her position as Chair of the Technical Committee for UNEP-Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA). The UK believes Ruth would be an excellent candidate for this role and we would be happy to provide the Sessional Committee or Standing Committee with further information for their consideration if needed.

I have included a copy for Ruth's CV and a statement of her willingness to take up this role if appointed:

I would be grateful if you could pass this nomination on to the Sessional Committee and Standing Committee for their consideration.

Best wishes,  
Kris



**Kristopher Blake**  
CITES implementation and CMS  
International Biodiversity and Climate  
**Defra**

2<sup>nd</sup> floor, Horizon House, Bristol BS1 5AH  
0208 02 63500 Mob: 07880 441679

*I work flexible hours Monday to Thursday. I don't expect you to respond to emails outside of your own working hours.*

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## Marco Barbieri

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**From:** Blake, Kristopher <>  
**Sent:** Friday, 19 February 2021 17:16  
**To:** Ruth Cromie  
**Subject:** RE: CMS COP-Appointed Councillor position

Dear Kris,

Should I be selected for the CMS COP-Appointed Councillor position for invasive alien species and wildlife disease, I would be delighted to accept the position.

Best wishes

Ruth

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WWT Research Fellow  
Chair of AEWA Technical Committee

Email: \_\_\_\_\_

Mobile telephone:

Address:

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## SUMMARY

- Chair of Technical Committee for UNEP-Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)
- Member of UNEP-Convention on Migratory Species (CMS) Preventing Poisoning Working Group
- Until recently Head of Ecosystem Health at the Wildfowl & Wetlands Trust (WWT), Slimbridge, UK.
- PhD from University College London in veterinary microbiology.
- Over 30 years of experience as conservation biologist specialising in: waterbirds and wildlife health; practical One Health and ecosystem health solutions; disease risk management for conservation breeding and translocations; particular expertise in tuberculosis, avian influenza and lead poisoning.
- Experienced in laboratory analyses (including diagnostics), field research, surveillance, capacity building, disease management and contingency planning.
- Experienced at environmental policy and advocacy; producing technical materials for multi-lateral environmental agreements (MEAs) including resolutions and MEA processes.
- Experienced ecosystem health lecturer, examiner and course co-ordinator.

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## HIGHER EDUCATION

**Ph.D.**

- 1987-1991. University of London, University College and Middlesex School of Medicine; PhD. The development of a vaccine for avian tuberculosis for wildfowl.

**B.Sc. (Hons.)**

- 1982-1985. University of London, Goldsmith's College.

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## CURRENT RELEVANT PROFESSIONAL POSITIONS

- Chair of AEWA Technical Committee.
- WWT Research Fellow.
- CMS Preventing Poisoning Working Group: member.
- Ramsar Scientific and Technical Review Panel: member - ecosystem approaches to health in wetlands, exposure to toxins and control of vectors in wetlands.
- EU Delta-flu project Member of Multi-actor Panel, representing interfaces between poultry and wildlife and conservation sectors.
- De facto co-ordinator CMS/FAO Scientific Task Force on Avian Influenza and Wild Birds.
- Guest lecturer various post-graduate programmes.
- Active member of IUCN Wildlife Health Specialist Group.

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## WORK HISTORY

|            |  |
|------------|--|
| 2020-      | Independent ecosystem health consultant and lecturer, and WWT Research Fellow      |
| 2014-2020  | Head of Ecosystem Health, WWT  |
| 2005 -2014 | Head of Wildlife Health, WWT   |
| 2000-2005  | Head of Waterbird Biology, WWT.  |
| 1997-2000  | Research Manager (Aviculture and Animal Health), WWT.                              |
| 1997-1997  | Field Assistant, University of West Indies, Trinidad and Tobago.                   |
| 1997-1997  | Educational Exhibit Designer, Canterbury Christ Church College.                    |
| 1995-1996  | Research Fellow, Smithsonian Institution, Washington DC, USA.                      |
| 1993-1995  | Research Fellow, Durrell Institute of Conservation and Ecology (DICE), Canterbury. |
| 1991-1993  | Senior Research Officer, WWT.  |
| 1988-1992  | Visiting Researcher, Hong Kong University, Hong Kong (regular research trips).     |
| 1985-1986  | Research Assistant and demonstrator, University of London, Goldsmith's College.    |

Throughout – course co-director/lecturer/examiner at Royal Veterinary College, Institute of Zoology, Universities of Bristol, London, Newcastle, Reading, Durrell Institute and Durrell International Training Centre (Jersey).

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## DUTIES OF MOST RECENT WWT POST

- Managing and implementing WWT's Ecosystem Health programme on ecosystem approaches to health in wetlands i.e. research, surveillance, management and training, capacity building, policy and advocacy; and exploring and promoting the role of wetlands in human health and well-being.
  - Within WWT, managing the research and development of solutions within WWT's captive animal health and welfare programmes; managing WWT's ethics committee; and key member of WWT's Avian Influenza Technical Advisory Group (for contingency planning etc.).
- 

## SPECIALIST SKILLS AND ACHIEVEMENTS

### ***Familiarity with MEA processes***

1. Involved in drafting resolutions and supporting technical documentation, plus familiarity with functioning of Ramsar Convention, CMS and AEWA. Chair of AEWA Technical Committee.

### ***Ecosystem Health General***

2. Production of Resolutions on wildlife and ecosystem health for CMS and ecosystem approaches to health (both human and animal) in wetlands for the Ramsar Convention.
3. On behalf of Ramsar's Scientific Technical Review Panel produced substantive disease management guidance for international wetland managers and decision makers (Ramsar Wetland Disease Manual); currently being implemented; and contributed to WHO/Ramsar 'Health Wetlands, Healthy People' Technical Report, plus guidance on control of vectors in wetlands.
4. Member of UN FAO/CMS Scientific Task Force on Wildlife and Ecosystem Health (involved in creation thereof, currently dormant).
5. Investigating role of wetlands in human health and well-being including social prescribing and development of assessment methodologies in particular in urban wetland development projects, and socio-ecological value of wetlands.
6. Defra: Partner in GB Wildlife Disease Surveillance Partnership, past member of steering group of Defra project to assess disease and nuisance threats from wetland expansion in England.
7. Responsible for measuring and reducing disease threats at WWT visitor centres and protected areas by e.g. ensuring disease management is part of wetland site management plans.
8. Investigating disease prevalence and dynamics in various wetland wildlife including birds, mammals and

amphibians and developing control management strategies particularly for emerging infectious diseases.

9. Development and implementation of disease risk analyses and management for translocations of wetland species including Eurasian cranes (*Grus grus*), black-tailed godwits (*Limosa limosa*), and spoon-billed sandpipers (*Calidris pygmaea*).

#### **Avian Influenza**

10. Production of Resolutions on avian influenza for Ramsar, CMS and AEWA, including extensive guidance for Ramsar Technical Report.
11. Member (and de facto co-ordinator) of UN FAO/CMS Scientific Task Force on Avian Influenza and Wild Birds.
12. Key member of WWT's Avian Influenza Technical Advisory Group, which provides strategic direction to WWT on avian influenza issues, including risk assessment, contingency planning, communications, captive bird biosecurity, human health and safety and wild bird surveillance.
13. Working with UK government: managed numerous contracts e.g. Defra's live and dead wild bird avian influenza surveillance programme; member of Defra's Ornithological Expert Panel on wild bird surveillance and avian influenza contingency planning.
14. International live wild bird surveillance and training missions for multiple partners including in Kenya, Nigeria, Iceland, Greenland and Bangladesh.
15. Partner in range of international AI projects, including developed and provided training programmes for avian influenza wild bird surveillance in collaboration with FAO, Wetlands International and EC in UK and Nigeria.
16. Member of Multi-actor Panel for EU Delta-flu project.

#### **Lead Poisoning**

17. Member of CMS Preventing Poisoning Working Group and undertook assessment of global lead poisoning in migratory species, and guidelines for tackling problem for Resolution 11.15.
18. Drafted and developed resolutions on lead from inception to adoption for IUCN WCC 2016 and UNEA3.
19. Regular contributor to EU processes for dealing with lead (European Chemicals Agency and REACH).
20. Investigator of current state of lead poisoning in UK; compliance with lead shot regulations in England and reasons behind non-compliance (including government-funded Defra project); measuring impact of regulations; and social science methods for studying human dimensions of use of lead ammunition.
21. UK Government processes: Past member of UK government steering group investigating methodology for reviewing lead shot compliance (2006/07); Member of UK process (Lead Ammunition Group) dealing with risks from lead ammunition for Defra and Food Standards Agency.
22. Contributor to investigations of human health risks of lead ammunition in game for human consumption and economics of use of lead ammunition.
23. Advocacy for wide range of stakeholders.

#### **Mycobacterioses/Tuberculosis**

24. Recognised as expert on avian mycobacteriosis in waterbirds (and marsupials) having developed vaccine and diagnostic assays, environmental management techniques and explored epidemiological aspects.

#### **Teaching and Capacity Building**

25. Regular ecosystem health and conservation biology lecturer and field trip provider for numerous post-graduate programmes.
26. Previous external examiner for ZSL/Royal Veterinary College MSc. Programmes in Wild Animal Health and Wild Animal Biology.
27. Previous regular co-director of the Durrell Wildlife Conservation Trust Summer School in Endangered Species Management.
28. International training programmes for avian influenza (see above).

## PUBLICATIONS

- STROUD, D.A., Cromie, R., Finlayson, M., Lewis, M., Mundkur, T., Pritchard, D., Spray, C.M. Tasker, M., Tierney, N., Tierney, R., and Wilson, J.D. (2021). International nature conservation treaties—a UK perspective. *British Wildlife*. (In press).
- NEWTH, J.L., McDonald, R.A., Wood, K.A., Rees, E.C., Semenov, I., Chistyakov, A., Mikhaylova, G., Bearhop, S., Cromie, R.L., Belousova, A., Glazov, P., & Nuno. A. (2020). Predicting intention to hunt protected wildlife: a case study of Bewick's swans in the European Russian Arctic. *Oryx* (In press).
- MUIR, A., Ellis, M., Blake, D.P., Chantrey, J., Strong, E.A., Reeves, J.P., Cromie, R.L. (2020). *Sarcocystis rileyi* in UK free-living wildfowl (Anatidae): surveillance, histopathology and first molecular characterisation. *Veterinary Record* 186, 186.
- CROMIE, R., Newth, J., & Strong, A. (2019). Transitioning to non-toxic ammunition: Making change happen, *Ambio*, 48, 1079-1096. <https://doi.org/10.1007/s13280-019-01204-y>.
- ARNEMO, J.M., Cromie, R., Fox, A.D. et al. (2019). Transition to lead-free ammunition benefits all. *Ambio* 48, 1097–1098. <https://doi.org/10.1007/s13280-019-01221-x>.
- PAIN, D. J., Dickie, I., Green, R., Kanstrup, N., & Cromie, R. (2019). Wildlife, human and environmental costs of using lead ammunition: An economic review and analysis.. *Ambio*, 48 (9), 969-988. <https://doi.org/10.1007/s13280-019-01157-2>.
- MAUND, P.R., Irvine, K.N., Reeves, J., Strong, E., Cromie, R., Dallimer, M., Davies, Z.G. (2019). Wetlands for Wellbeing: Piloting a Nature-Based Health Intervention for the Management of Anxiety and Depression. *Int. J. Environ. Res. Public Health*, 16, 4413.
- REEVES, J.P., Knight, A.T., Strong, E.A., Heng, V., Neale, C., Cromie, R. & Vercammen, A. (2019). The application of wearable technology to quantify health and wellbeing co-benefits from urban wetlands. *Front. Psychol.* 10:1840. doi: 10.3389/fpsyg.2019.01840.
- NEWTH, J.L., Lawrence, A., Cromie, R.L., Swift, J.A., Rees, E.C., Wood, K.A., Strong, E.A., Reeves, J. & McDonald, R.A. (2019). Perspectives of ammunition users on the use of lead ammunition and its potential impacts on wildlife and humans. *People Nat.* 2019;00:1–15. <https://doi.org/10.1002/pan3.30>.
- NEWTH, J.L., Wood, K.A., McDonald, R.A., Nuno, A., Semenov, I., Chistyakov, A., Mikhaylova, G., Bearhop, S., Belousova, A., Glazov, P., Cromie, R.L., & Rees, E.R. (2019). Conservation implications of misidentification and killing of protected species. *Conservation Science and Practice*. 1:e24. <https://doi.org/10.1111/csp2.24>.
- WOOD, K.A. Brown, M.J., Cromie, R.L., Hilton, G.M., Mackenzie, C., Newth, J.L., Pain, D.J., Perrins, C.M., & Rees, E.C. (2019). Regulation of lead fishing weights results in mute swan population recovery. *Biological Conservation*, Volume 230, pp 67-74, <https://doi.org/10.1016/j.biocon.2018.12.010>.
- HANSEN, R., Brown, I., Brookes, S., Welchman, D., and Cromie, R. (2018). Current status of avian influenza in Europe and the UK. *Vet. Rec.* Volume 182: 2, <http://dx.doi.org/10.1136/vr.k128>. PMID:29326393.
- O'BRIEN, M.F., Costa, T., Beckmann, K.M., Cromie, R.L., & Brown, M.J. (2018). Disease outbreak investigation in waterfowl collections in the UK. *Companion Animal* 2018 23:3, 168-177.
- STROUD D.A., Cromie, R., Crowe, O., Stroud, R., Thomas, H., Tierney, N., Walsh, A., & Fox, A.D. (2018). Annual movements of Interior Canada Geese *Branta canadensis* interior marked in Greenland, revealed by recoveries and re-sightings during 1992–2018. *Wildfowl* 68: 70–83.
- DUFF, P., Neale, S., Cromie, R., Kerr, M., & Irvine, R. (2017). Suspected avian botulism outbreaks in wild waterbirds. *Veterinary Record* 2017 181: 179-180. doi: 10.1136/vr.j3829.
- O'BRIEN, M.F., K.M. Beckmann, N.S. Jarrett, G.M. Hilton, N.G. Carmichael and R.L. Cromie (2017). Blood biochemistry and haematology values of juvenile Eurasian cranes (*Grus grus*) raised in captivity for reintroduction *Journal of Zoo and Aquarium Research* 5(1). 38-47.
- CROMIE, R. (2016) Wetland Pest and Disease Regulation. In: Finlayson C. et al. (eds) *The Wetland Book*. Springer, Dordrecht. [https://doi.org/10.1007/978-94-007-6172-8\\_228-2](https://doi.org/10.1007/978-94-007-6172-8_228-2)

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- O'BRIEN, M.F., Lee, R., Cromie, R. and Brown, M.J., (2016). Assessment of the rates of injury and mortality in waterfowl captured with 5 methods of capture and techniques for minimizing risks. *Journal of Avian Medicine and Surgery*, 30(2), pp.212-213. *J Wildl Dis.* 52(2 Suppl):S86-95. doi: 10.7589/52.2S.S86.
- CHAPMAN, J. R., Hellgren, O., Helin, A. S., Kraus, R. H., Cromie, R. L., & Waldenström, J. (2016). The evolution of innate immune genes: purifying and balancing selection on  $\beta$ -defensins in waterfowl. *Molecular Biology and Evolution*, 33(12), 3075-3087.
- CROMIE, R., Newth, J., Reeves, J., O'Brien, M., Beckmann, K., & Brown, M. (2015). The sociological and political aspects of reducing lead poisoning from ammunition in the UK: why the apparently simple solution is so difficult. In: Delahay, R.J. & Spray, C.J. (Eds.) (2015). *The Oxford Lead Symposium. Lead Ammunition: understanding and minimising the risks to human and environmental health.* Edward Grey Institute, Oxford University, UK. pp 104-124.
- PAIN, D., Cromie, R., & Green, R. (2015). Lead poisoning of UK wildlife from ammunition-derived lead. In: Delahay, R.J. & Spray, C.J. (Eds.) (2015). *The Oxford Lead Symposium. Lead Ammunition: understanding and minimising the risks to human and environmental health.* Edward Grey Institute, Oxford University, UK. pp 58-84.
- CUNNINGHAM A.A., Beckmann K., Perkins M., Fitzpatrick L., Cromie R., Redbond J., O'Brien M.F., Ghosh P., Shelton J., Fisher M.C. (2015). Emerging disease in UK amphibians, *Vet. Rec.* May 2;176(18):468. doi: 10.1136/vr.h2264.
- NEWTH J.L., Cromie R.L. & Kanstrup N. Lead shot in Europe: conflict between hunters and conservationists (2015). In: *Conflicts in Conservation, Navigating Towards Solutions.* Eds: S.M. Redpath, R.J. Gutiérrez, K.A. Wood & J.C. Young. Cambridge University Press. Pp 172-175.
- UNEP/CONVENTION ON MIGRATORY SPECIES (2014). Resolution 11.15: Preventing poisoning of migratory birds. (Prepared by the CMS Preventing Poisoning Working Group).
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- RAMSAR CONVENTION ON WETLANDS (2012). Resolution XI.12 Wetlands and health: taking an ecosystem approach. pp17. [Drafted primarily by Pierre Horwitz, Max Finlayson and Ruth Cromie et al].
- CROMIE, R.L., R. Lee, R.J. Delahay, J. L. Newth, M.F. O'Brien, H.A. Fairlamb, J.P. Reeves & D.A. Stroud. (2012). *Ramsar Wetland Disease Manual: Guidelines for Assessment, Monitoring and Management of Animal Disease in Wetlands.* Ramsar Technical Report No. 7. Ramsar Convention Secretariat, Gland, Switzerland. pp353.
- LEE, R., Stroud, D.A. and Cromie, R.L. (2012). Avian influenza and wetlands. In: Horwitz, P., Finlayson, M. and Weinstein, P. *Healthy wetlands, healthy people: a review of wetlands and human health interactions.* Ramsar Technical Report No. 6. Secretariat of the Ramsar Convention on Wetlands, Gland, Switzerland, & The World Health Organization, Geneva, Switzerland. ISBN 2-940073-32-5. pp114.
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**ATTACHMENT 5**

**NOMINATION OF PROF. URSULA HÖFLE**  
*(Submitted by the Government of Spain)*



## TO WHOM IT MAY CONCERN

### STATEMENT TO SUPPORT THE CANDIDATURE OF PROF. URSULA HÖFLE AS COP APPOINTED COUNCILLOR FOR THE SUBJECT AREA OF INVASIVE SPECIES (INCLUDING DISEASE, FERAL ANIMALS, MARINE PESTS AND WEEDS)

This document aims to Support Prof. Höfle's candidature. The candidate has a strong background in wildlife diseases and although her primary focus is currently on avian species and insect vectors, she has worked on marine mammal pathology, lagomorphs and ungulates especially wild boar. She has studied diseases such as bovine tuberculosis, a multi-host disease that has a strong link to wildlife reservoirs and specifically to feral and invasive exotic species in many parts of the world. A veterinarian native from Germany Dr Höfle has developed her professional and scholarly career in Spain where she gathered experience in wildlife rehabilitation before setting up her own lab within the Health and Biotechnology Research Group and the National Institute for Game and Wildlife Research (Instituto de Investigación en Recursos Cinegéticos). She is thus fluent in English, Spanish, French and German and has ample experience in presenting information to an international audience.

Prof. Höfle and her team are skilled in the detection of emerging diseases such as West Nile and other Flaviviruses and are on the forefront of research on one health issues of global importance such as antimicrobial resistance and flavivirus expansion. More importantly she forms part of a research group that is among the leaders in many aspects of disease emergence from wildlife, wildlife population monitoring and management of the wildlife-domestic animal-human interface. Although she is not currently specifically studying aspects of COVID19, the research group she belongs to is, and her research includes avian coronaviruses and their exchange at the domestic and wild animal interface. In addition to being based at a multidisciplinary research institution she has also close ties with the agricultural faculty and the environmental sciences departments at her university.

CORREO ELECTRÓNICO:



MINISTERIO DE CIENCIA  
E INNOVACIÓN



INSTITUTO DE INVESTIGACIÓN EN RECURSOS CINEGÉTICOS (IREC)

## TO WHOM IT MAY CONCERN

I, Ursula Höfle, declare herewith that, in the case of being selected for the appointment as COP-appointed Councillor in the subject area of Invasive Species (including disease, feral animals, insects, marine pests and weeds) I am willing to accept the appointment and fulfil my tasks to the best of my expertise and abilities.

Signed in Ciudad Real on the 4th february 2021,

Prof. Dr. Ursula Höfle

CORREO ELECTRÓNICO:

**Part A. PERSONAL INFORMATION**

**CV date** 29/01/2021

|                                      |              |     |  |
|--------------------------------------|--------------|-----|--|
| First and Family name                | Ursula Höfle |     |  |
| Social Security, Passport, ID number |              | Age |  |
| Researcher codes                     |              |     |  |
|                                      |              |     |  |

(\*) *Optional*

(\*\*) *Mandatory*

**A.1. Current position**

|                                |   |        |            |
|--------------------------------|---|--------|------------|
| Name of University/Institution | Universidad de Castilla – La Mancha   |        |            |
| Department                     | Ciencia y Tecnología Agroforestal y Genética  |        |            |
| Address and Country            |   |        |            |
| Phone number                   |   | E-mail |            |
| Current position               | Tenured professor   | From   | 01/07/2007 |
| Key words                      | Avian pathology, Avian influenza, Flavivirus, antibiotic resistance, wild birds, epidemiology |        |            |

**A.2. Education**

| PhD, Licensed, Graduate      | University                                  | Year |
|------------------------------|---|------|
| Licensed Veterinary medicine | Tieraerztliche Hochschule Hannover, Germany | 1995 |
| PhD Veterinary Medicine      | Justus-Liebig-Universität Giessen , Germany | 2002 |

**A.3. General indicators of quality of scientific production** (see instructions)

1- Recognized six-year-terms: 2 (2002-2008 and 2009-2014)

2- PhDs directed (since 2010): 8, ongoing: 2.

Indice h (WOS): 32 (12/2020)

3- Total citations: 2969, Mean citations/year (5-year interval): 109,96, No. Q1Publications: 55

4- PhDs presented in past 5 years under my direction: 3 (One January 26th, 2021)

4- MSc-thesis directed since 2010: 20, Bachelor's degree thesis: 6, 3 ongoing

5- Awards: 2010- Best poster Ninth congress EWDA, Vlieland, The Netherlands, 2010.

2012- Young Scientist Award, Virgo Consortium, ERASMUS MC, The Netherlands.2018- EWDA Wildlife Research Microgrant

6- Presentations at national and International congresses: 174, 32 invited/keynote

**Part B. CV SUMMARY** (max. 3500 characters, including spaces)

Ursula Höfle, a veterinary scientist graduated from the vet school in Hannover, Germany, leads the avian pathology section of the Health and Biotechnology Research Group at the Spanish National Game Research Institute. She is a veterinary pathologist by training and has a history of working at rehabilitation centres, and in forensic pathology of endangered wildlife. Early in her career she worked for six months as grant student of the marine mammal pathology project coordinated by the London zoological society. After earning her PhD on viral infections in captive and free-living birds of prey in 2002, she served as postdoc researcher on wild boar diseases at IREC, focusing on both viral diseases and the role of the wild boar as a reservoir for bovine tuberculosis. During a second postdoc at the Deheson del Encinar Research station between 2004-2007 she initiated her line of study on avian infectious diseases with a project on avian influenza prevalence in wild birds in central Spain. Since she has since led eight national and three regional research projects on viral diseases of partridges, avian influenza, Flaviviruses and antibiotic resistant bacteria in wild birds. She has participated in 15 research projects including five European grants on the surveillance and prevention of the emergence of diseases from the wildlife reservoir and the harmonization of wildlife population and disease data. She has published more than 100 papers and is co-author of 8 book chapters on avian diseases and pathology and a monography on white stork movement ecology. She has



presented more than 170 communications at national and international congresses. In 2012 she was awarded the Virgo Young Scientists Grant that allowed her to conduct an experimental study on avian influenza homologous and heterologous cross protective immunity in a wild bird model, the black headed gull at the Erasmus MC in Rotterdam and the RIVM in Bilthoven (The Netherlands). In 2018 she was awarded a small research grant for the study of metabolic bone disease in wild white storks by the European association of wildlife diseases (EWDA). Her primary interest is in the integration of host ecology in the study of the epidemiology of (avian) infectious and shared diseases for which she integrates experimental and descriptive studies in model species such as white storks, magpies, red-legged partridges and house sparrows. She has directed and co-directed 10 PhDs one of which was an industrial research grant, and more than twenty MScs thesis. She has also published or participated in 15 papers transferring research results to the general public and a journal article in relation to the recent COVID19 and management of similar viruses in poultry. Her research has helped to shape surveillance plans for avian influenza and Flaviviruses leading authorities to include samples from rehabilitation centers and data derived from experimental AIV infections in red-legged partridges has provided baseline data on avian diseases for national legislation on the movement of wildlife. In addition to her research, she teaches graduate and postgraduate courses particularly in the master's course of her institute and a specialist course on wildlife disease epidemiology. She is a review editor in virology for frontiers and has revised research projects for the Spanish National Research agency and organisms from other countries. Her recent research includes the dispersal of antibiotic resistant *E. coli* by landfill feeding white storks, the eco-epidemiology of avian pathogens at the wildlife domestic poultry interface and the use of omics technology in the search for vaccine candidate antigens against the poultry red mite.

### **Part C. RELEVANT MERITS** (sorted by typology)

#### **C.1. Publications** (see instructions)

- 1- Höfle U, Jose Gonzalez-Lopez J, Camacho MC, Solà-Ginés M, Moreno-Mingorance A, Manuel Hernández J, De La Puente J, Pineda-Pampliega J, Aguirre JI, Torres-Medina F, Ramis A, Majó N, Blas J, Migura-Garcia L. Foraging at Solid Urban Waste Disposal Sites as Risk Factor for Cephalosporin and Colistin Resistant *Escherichia coli* Carriage in White Storks (*Ciconia ciconia*). *Front Microbiol.* 2020 Jul 28;11:1397. doi: 10.3389/fmicb.2020.01397.
- 2-Lima-Barbero JF, Contreras M, Mateos-Hernández L, Mata-Lorenzo FM, Triguero-Ocaña R, Sparagano O, Finn RD, Strube C, Price DRG, Nunn F, Bartley K, Höfle U, Boadella M, Nisbet AJ, Fuente J, Villar M. A vaccinology Approach to the Identification and Characterization of *Dermanyssus Gallinae* Candidate Protective Antigens for the Control of Poultry Red Mite Infestations. *Vaccines (Basel).* 2019 Nov 20;7(4):190. doi: 10.3390/vaccines7040190.
- 3-Pineda-Pampliega J, Herrera-Dueñas A, Mulder E, Aguirre JI, Höfle U, Verhulst S. 2020. Antioxidant supplementation slows telomere shortening in free-living white stork chicks. *Proc. R. Soc. B* 286: 20191917, <http://dx.doi.org/10.1098/rspb.2019.1917>
- 4- Jiménez de Oya N, Escribano-Romero E, Camacho MC, Blázquez AB, Martín-Acebes MA, Höfle U, Saiz JC. 2019. A Recombinant Subviral Particle-Based Vaccine Protects Magpie (*Pica pica*) Against West Nile Virus Infection. *Front Microbiol.* 10:1133. doi: 10.3389/fmicb.2019.01133.
- 5- Torrontegi O, Alvarez V, Acevedo P, Gerrikagoitia X, Höfle U, Barral M. 2019. Long-term avian influenza virus epidemiology in a small Spanish wetland ecosystem is driven by the breeding Anseriformes community. *Vet Res.* 50(1):4. doi:10.1186/s13567-019-0623-5.
- 6- Jiménez de Oya N, Camacho MC, Blázquez AB, Lima-Barbero JF, Saiz JC, Höfle U, Escribano-Romero E. 2018. High susceptibility of magpie (*Pica pica*) to experimental infection with lineage 1 and 2 West Nile virus. *Revista: PLoS Negl Trop Dis.* Clave : A Volumen : 10;12(4):e0006394 Fecha : 2018 doi: 10.1371/journal.pntd.0006394



- 7- Gómez P, Lozano C, Camacho MC, Lima-Barbero JF, Hernández JM, Zarazaga M, Höfle Ú, Torres C. 2016: Detection of MRSA ST3061-t843-mecC and ST398-t011-mecA in white stork nestlings exposed to human residues. *J Antimicrob Chemother.* 2016, 71(1):53-7. doi: 10.1093/jac/dkv314.
- 8- Gamino V, Escribano-Romero E, Blázquez AB, Gutiérrez-Guzmán AV, Martín-Acebes MÁ, Saiz JC, Höfle U. 2016. Experimental North American West Nile Virus Infection in the Red-legged Partridge (*Alectoris rufa*). *Vet Pathol.* 53(3):585-93. doi: 10.1177/0300985815612554.
- 9- Verhagen JH, Höfle U, van Amerongen G, van de Bildt M, Majoor F, Fouchier RA, Kuiken T. Long-term effect of serial infections with H13 and H16 low pathogenic avian influenza viruses in black-headed gulls. *J Virol.* 2015. 89:11507-22. doi: 10.1128/JVI.01765-15.
- 10- Höfle U, Gamino V, de Mera IG, Mangold AJ, Ortíz JA, de la Fuente J. 2013. Usutu virus in migratory song thrushes, Spain. *Emerg Infect Dis.* 19 1173-5 doi: 10.3201/eid1907.130199.

## C.2. Research projects

1- Title **ADISRA Birds' role in the dispersal of antibiotic resistance** SBPLY/19/180501/000325

Grant body: JCCM PRINCET2019-22

Duration: 2020- 2023

PI: Ursula Höfle SaBio IREC UCLM

Grant: 128.359€

2- Title : **BIRDS ON THE MOVE: adaptive migratory behaviour in response to global environmental change** 02/SAICT/2017

Grant body: ICETA 2017

Duration: 2018-2020

PI: Ines Catry

Role: Participating investigator. Leader workpackage on sanitary implications.

Grant: 237.903,54 €

3- Title: **Avian Influenza. Detection, Pathogenesis and Epidemiology at the wildlife domestic animal interface** RTA2015-00088-C03-02

Grant body: INIA

Duration:: 2017 until 25-6-2021 (prolonged)

PI: Ursula Höfle SaBio IREC UCLM

Grant: Parte IREC UCLM 153.000€

4- Title: **Improving current understanding and research for sustainable control of the poultry red mite *Dermanyssus gallinae* (COREMI)** FA COST Action FA1404

Grant body: Horizon 2020 UE

Duration: 24-11-2014 – 23-11-2018

PI: Olivier Sparagano

Role: Participating investigator

5- Title: **COllaborative Management Platform for detection and Analyses of (Re-)emerging and foodborne outbreaks in Europe (COMPARE)** Grant 377/14

Grant body: Horizon 2020 UE

Duration: 01 -12- 2014 til 30 -11-2018

PI: Frank Aarestrup (coordinador); C. Gortázar IP SaBio UCLM

Role: Participating investigator Grant: IREC UCLM 400.000€

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6- Title: **Development of new biotechnological tools for the surveillance and control of emergng Flaviviruses in Spain.** E-RTA2017-00003-C02-02

Grant body: INIA2017

Duration, 2018- 2020

PI (REC): Isabel G. Fernandez de Mera

Grant IREC: 57.702 €





7- Title: **Anticipating the global onset of novel epidemics Ref: 278976, Acronimo ANTIGONE**

Grant body: European Union  
Duration: 2011 hasta: 2016  
P: Thijs Kuiken, Erasmus MC (coordinador)  
Role: Participating investigator

8- Title: **Pathogenesis and Control of Flaviviruses ERTA2013-00013 -C04-03**

Grant body: Instituto Nacional de Investigación y Tecnología Agraria INIA  
Duration: 2014 - 2017  
PI. subproject 3: Ursula Höfle  
Grant: 45.480€

9- Title: **WILDLIFE: COLLECTING AND SHARING DATA ON WILDLIFE POPULATIONS, TRANSMITTING ANIMAL AND HUMAN DISEASE AGENTS OC/EFSA/ALPHA/2016/01**

Grant body: EFSA  
Duration: 26-1-2017 til 25-1-2023  
PI: Joaquín Vicente Baños  
Role: Participating investigator  
Grant: 608.790,84 €

10- Title: **Sanitary and public health risks of the Production of red-legged partridges (Alectoris rufa): Colibacillosis, salmonellosis and antibiotic resistant bacteria. POIC2014-001-P**

Grant body: JCCM  
Duration 27 /9/ 2014 to: 31/12/ 2016 PI: Ursula Höfle Grant: 67.508 €

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### **C.3. Contracts, technological or transfer merits**

**Studies on the impact of climate change related heat stress on the immunology of endangered birds of prey.**

Type: Art 83  
Organization: Fundación Aquila/Fundación Iberdrola  
Duration: 01/06/2019 to 30/11/2019  
PI: Ursula Höfle  
Amount financed: 6.050 €

### **C.4. Patents:--**

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### **C.5, Reviewer**

Review editor Frontiers in Microbiology, section virology.  
Emerging Infectious Diseases, European Journal of Wildlife Research, Spanish Journal for Agricultural Research, Veterinary Parasitology, Veterinary Research, Veterinary Pathology, Avian Pathology, PlosOne, African Journal for Veterinary Medicine, Canadian Journal of Zoology, Journal of Wildlife diseases, Peer Journal, Veterinary Microbiology, BMC Evolutionary Biology, Virulence, Preventive Veterinary Medicine, Veterinary Microbiology, Virulence, Frontiers in Veterinary Medicine, Frontiers in Microbiology etc.  
Reviewer of projects for research agencies in Spain, Argentina, Polonia and Sweden.

|                      |            |
|----------------------|------------|
| <b>Fecha del CVA</b> | 13/12/2020 |
|----------------------|------------|

### Parte A. DATOS PERSONALES

|                                      |                     |      |  |
|--------------------------------------|---------------------|------|--|
| Nombre y apellidos                   | Ursula Hofle Hansen |      |  |
| DNI/NIE/pasaporte                    |                     | Edad |  |
| Núm. identificación del investigador | Researcher ID       |      |  |
|                                      | Código Orcid        |      |  |

#### A.1. Situación profesional actual

|                       |  |                    |            |
|-----------------------|--|--------------------|------------|
| Organismo             | Universidad de Castilla – La Mancha                                |                    |            |
| Dpto./Centro          | Ciencia y Tecnología Agroforestal y Genética                       |                    |            |
| Dirección             |  |                    |            |
| Teléfono              |  | correo electrónico |            |
| Categoría profesional | Profesor contratado doctor   | Fecha inicio       | 01/07/2007 |
| Espec. cód. UNESCO    | 2  |                    |            |
| Palabras clave        | Patología aviar, Influenza aviar, Virus West Nile, enterobacterias |                    |            |

#### A.2. Formación académica

| Licenciatura/Grado/Doctorado | Universidad                                  | Año        |
|------------------------------|--|------------|
| Licenciada en Veterinaria    | Tieraerztliche Hochschule Hannover, Alemania | 22-12-1995 |
| Doctora en Veterinaria       | Justus-Liebig-Universität Giessen, Alemania  | 06-06-2002 |

#### A.3. Indicadores generales de calidad de la producción científica

1- Sexenios concedidos: 2 (2002-2008 y 2009-2014)

2- Tesis dirigidas (últimos 10 años): 11, en curso: 3.

Indice h (WOS): 32 (12/2020)

3- Citas totales: 2969, Media de citas/año (5 años): 109,96, No. Publicaciones Q1: 53

4- Tesis dirigidas leídas en los últimos 5 años: 3

4- Trab. fin de master/DEA dirigidos en los últimos 10 años: 22, Trab. Fin de grado: 5, 3 en curso

5- Premios: 2010- Mejor poster Noveno congreso EWDA, Vlieland, Países Bajos, 2010.

2012- Young Scientist Award, Virgo Consortium, ERASMUS MC, Países Bajos.

6- Contribuciones a congresos científicos nacionales e internacionales: 174, 31 invitadas

### Parte B. RESUMEN LIBRE DEL CURRÍCULUM

Úrsula Höfle trabaja en calidad de investigadora en el grupo SaBio del Instituto de Investigación en Recursos Cinegéticos (IREC, CSIC-UCLM) desde 2007 como profesora en este centro. Sus estudios se centran cómo la interacción de aves silvestres con animales domésticos y/o humanos afecta su conservación y su papel en el mantenimiento y la dispersión de enfermedades compartidas. Veterinaria de formación, obtuvo su Doctorado en Ciencias Veterinarias en la Universidad de Giessen (Justus-Liebig-Universität Giessen, Alemania) en 2002. Completó un periodo postdoctoral en el IREC durante el que estudió procesos infecciosos en el jabalí, y otro en el Dehesón del Encinar (JCCM) iniciando su línea actual sobre enfermedades aviares entre 2004 y 2007. Como investigadora desarrolla su labor en el ámbito de la fauna silvestre, destacando sus trabajos sobre enfermedades emergentes y compartidas como la fiebre/encefalitis por el virus West Nile y la influenza aviar, y las resistencias a antibióticos en bacterias en aves silvestres. Anteriormente, entre 1996 y 2003, como veterinaria en el Centro De Estudio de Rapaces Ibéricas (CERI) de la Junta de Comunidades de Castilla – La Mancha, desempeño labores de investigación médica y anatómo-patológica. Sus trabajos de investigación han sido publicados en 92 artículos originales en revistas científicas internacionales, y 8 revistas nacionales. Además, ha sido

autora o co-autora de 6 capítulos de libro y es co-autora de una monografía sobre la cigüeña blanca publicada en 2020. Ha dirigido ocho proyectos de investigación de ámbito nacional y tres de ámbito regional y ha participado en otros 15 proyectos de investigación de ámbito nacional y europeo, Ha presentado más de 160 comunicaciones en congresos nacionales e internacionales y formado parte de 6 comités o reuniones internacionales de expertos en enfermedades silvestres o emergentes y ha sido profesora en 8 cursos de contenido científico-técnico en las materias de su especialidad. Desde 2004 ha establecido una línea propia de investigación en el seno del grupo de Sanidad y Biotecnología del IREC, dedicada a entender el impacto del cambio global en la epidemiología de enfermedades infecciosas en aves silvestres. Esta línea incluye enfermedades compartidas entre aves silvestres, animales domésticos y humanos como la influenza aviar, la fiebre del Nilo Occidental, pero también enfermedades de importancia para la conservación de especies amenazadas, como Trichomoniasis, Salmonellosis, malaria aviar y herpesvirus. En 2012 recibió un Young Scientist Award del Virgo Consortium (Países Bajos) para el estudio experimental de la inmunología frente a los virus de influenza aviar en un modelo de aves silvestres. Desde 2008 la emergencia de resistencias frente a los antimicrobiales en enterobacterias en aves silvestres que se alimentan en basureros y en perdices rojas (*Alectoris rufa*) de granjas cinegéticas es una parte importante de su investigación.

## Parte C. MÉRITOS MÁS RELEVANTES

### C.1. Publicaciones

- 1- Höfle U, Jose Gonzalez-Lopez J, Camacho MC, Solà-Ginés M, Moreno-Mingorance A, Manuel Hernández J, De La Puente J, Pineda-Pampliega J, Aguirre JI, Torres-Medina F, Ramis A, Majó N, Blas J, Migura-García L. Foraging at Solid Urban Waste Disposal Sites as Risk Factor for Cephalosporin and Colistin Resistant *Escherichia coli* Carriage in White Storks (*Ciconia ciconia*). *Front Microbiol.* 2020 Jul 28;11:1397. doi: 10.3389/fmicb.2020.01397. PMID: 32849315; PMCID: PMC7399022
- 2- Pineda-Pampliega J, Herrera-Dueñas A, Mulder E, Aguirre JI, Höfle U, Verhulst S. 2020. Antioxidant supplementation slows telomere shortening in free-living white stork chicks. *Proc. R. Soc. B* 286: 20191917, <http://dx.doi.org/10.1098/rspb.2019.1917>
- 3- Jiménez de Oya N, Escribano-Romero E, Camacho MC, Blázquez AB, Martín-Acebes MA, Höfle U, Saiz JC. 2019. A Recombinant Subviral Particle-Based Vaccine Protects Magpie (*Pica pica*) Against West Nile Virus Infection. *Front Microbiol.* 10:1133. doi: 10.3389/fmicb.2019.01133.
- 4- Ruiz-Ripa L, Gómez P, Alonso CA, Camacho MC, de la Puente J, Fernández-Fernández R, Ramiro Y, Quevedo MA, Blanco JM, Zarazaga M, Höfle U, Torres C. 2019. Detection of MRSA of Lineages CC130-mecC and CC398-mecA and *Staphylococcus delphini*-Inu(A) in Magpies and Cinereous Vultures in Spain. *Microb Ecol.* doi: 10.1007/s00248-019-01328-4
- 5- Torrontegi O, Alvarez V, Acevedo P, Gerrickagoitia X, Höfle U, Barral M. 2019. Long-term avian influenza virus epidemiology in a small Spanish wetland ecosystem is driven by the breeding Anseriformes community. *Vet Res.* 50(1):4. doi:10.1186/s13567-019-0623-5.
- 6- Jiménez de Oya N, Camacho MC, Blázquez AB, Lima-Barbero JF, Saiz JC, Höfle U, Escribano-Romero E. 2018. High susceptibility of magpie (*Pica pica*) to experimental infection with lineage 1 and 2 West Nile virus. *Revista: PLoS Negl Trop Dis.* Clave : A Volumen : 10;12(4):e0006394 Fecha : 2018 doi: 10.1371/journal.pntd.0006394
- 7- Gómez P, Lozano C, Camacho MC, Lima-Barbero JF, Hernández JM, Zarazaga M, Höfle U, Torres C. Título: Detection of MRSA ST3061-t843-mecC and ST398-t011-mecA in white stork nestlings exposed to human residues. *Revista: J Antimicrob Chemother.* 2016, 71(1):53-7. doi: 10.1093/jac/dkv314.
- 8- Gamino V, Escribano-Romero E, Blázquez AB, Gutiérrez-Guzmán AV, Martín-Acebes MÁ, Saiz JC, Höfle U. Título: Experimental North American West Nile Virus Infection in the Red-legged Partridge (*Alectoris rufa*). *Revista: Vet Pathol.* Año: 2016 Volumen: 53(3):585-93. doi: 10.1177/0300985815612554..
- 9- Verhagen JH, Höfle U, van Amerongen G, van de Bildt M, Majoor F, Fouchier RA, Kuiken



T. Título: Long-term effect of serial infections with H13 and H16 low pathogenic avian influenza viruses in black-headed gulls. Revista: J Virol. Año: 2015 Volumen: 89  
Paginas:11507-22. doi: 10.1128/JVI.01765-15.  
10- Höfle U, Gamino V, de Mera IG, Mangold AJ, Ortíz JA, de la Fuente J. Título : Usutu virus in migratory song thrushes, Spain. Revista: Emerg Infect Dis. Volumen: 19 Paginas; 1173-5 Año 2013, doi: 10.3201/eid1907.130199.

#### Publicaciones divulgativas

- 1- Gortazar C., Höfle, U. Arnal, MC. Guía Vigilancia Sanitaria Fauna Silvestre. Ministerio de Agricultura, Pesca y Alimentación (MAPA). 2019. 43pp.
- 2- Bécares, J.; Blas, J.; López-López, P.; Schulz, H.; Torres-Medina, F.; Flack, A.; Enggist, P.; Höfle, U.; Bermejo, A. y De la Puente, J. 2019. Migración y ecología espacial de la cigüeña blanca en España. Monografía n.º 5 del programa Migra. SEO/BirdLife. Madrid. <https://doi.org/10.31170/0071>.

## C.2. Proyectos

- 1- Título del proyecto: **ADISRA Aves como dispersores de resistencias a los antibióticos**  
Entidad financiadora: JCCM  
Entidades participantes: IREC (CSIC-UCLM), Universidad de la Rioja, Hospital General de Alcazar de San Juan, Instituto regional de la salud, estación biológica de Doñana Universidad ERIE, Reino Unido  
Duración, desde: 2020 hasta: 2023  
Investigador responsable: Ursula Höfle SaBio IREC UCLM  
Número de Investigadores participantes: 3 del IREC, 13 en total  
IMPORTE TOTAL DEL PROYECTO: Parte IREC UCLM 128.359€
- 2- Título del proyecto: **Influenza Aviar. Detección, Patogenia y Epidemiología en el Interfaz entre Especies Silvestres y Domésticas RTA2015-00088-C03-02**  
Entidad financiadora: INIA  
Entidades participantes: IREC (CSIC-UCLM), CReSA, NEIKER Tecnalia  
Duración, desde: 2017 hasta: 25-6-2021  
Investigador responsable: Ursula Höfle SaBio IREC UCLM  
Número de Investigadores participantes: 4 del IREC, 13 en total  
IMPORTE TOTAL DEL PROYECTO: Parte IREC UCLM 153.000€
- 2- Título del Proyecto: **Improving current understanding and research for sustainable control of the poultry red mite *Dermanyssus gallinae* (COREMI) FA COST Action FA1404**  
Entidad financiadora: Horizon 2020 UE  
Entidades participantes: Mas de 30 grupos de 28 países liderado por el Moredun University en Reino Unido  
Duración: 24-11-2014 – 23-11-2018  
Investigador Responsable: Olivier Sparagano  
Número de Investigadores participantes: En España 6, en el IREC 2
- 3- Título del proyecto: **COllaborative Management Platform for detection and Analyses of (Re-)emerging and foodborne outbreaks in Europe (COMPARE) Grant 377/14**  
Entidad financiadora: Horizon 2020 UE  
Entidades participantes: 20 grupos coordinados desde Technical University of Denmark (DTU)  
Duración, desde: 01 diciembre 2014 hasta: 30 noviembre 2018  
Investigador responsable: Frank Aarestrup (coordinador); C. Gortázar IP SaBio UCLM  
Número de Investigadores participantes: >12 (6 de UCLM)



IMPORTE TOTAL DEL PROYECTO: Total consorcio 20.000.000€. Parte IREC UCLM 400.000€

4- Título del Proyecto: **DESARROLLO DE NUEVAS HERRAMIENTAS BIOTECNOLÓGICAS PARA LA VIGILANCIA Y EL CONTROL DE FLAVIVIRUS EMERGENTES EN ESPAÑA E-RTA2017-00003-C02-02**

Entidad financiadora: INIA

Entidades participantes: IREC, Grupo SaBio; Dpto. Biotecnología (INIA)

Duración, desde 2018- 2020

Investigador responsable: Juan Carlos Saiz Calahorra

Número de Investigadores participantes: 8

IMPORTE TOTAL DEL PROYECTO: Subproyecto IREC: 57.702 €

5- Título: **Anticipating the global onset of novel epidemics Ref: 278976, Acronimo ANTIGONE**

Entidad financiadora: European Union

Duración, desde: 2011 hasta: 2016

Investigador responsable: Thijs Kuiken, Erasmus MC (coordinador)

Número de Investigadores participantes (España):18

6- Título: **Patogénesis y Control de Flavivirus ERTA2013-00013 -C04-03**

Entidad financiadora: Instituto Nacional de Investigación y Tecnología Agraria INIA

Entidades participantes: Subproyecto 3 de proyecto coordinado, IREC (CSIC-UCLM-JCCM),

Subproyecto 1: Subdir general de Invest. Y Tecnología INIA, Subproyecto 2 Centro de Biología molecular Severo Ochoa: Subproyecto 4: Facultad de Veterinaria, Universidad de Leon Duración, desde: 2014 hasta: 2017

Investigador responsable: Ursula Höfle (Coordinador, Juan Carlos Saiz, INIA, subproyecto 1)

Número de Investigadores participantes (subproyecto 3): 3

IMPORTE TOTAL DEL PROYECTO: 45.480€

### C.3. Contratos

**Analítica serológica para la investigación sobre estrés ligado al cambio climático y su influencia en el potencial reproductivo en aves rapaces.**

Tipo de contrato: Contrato de asistencia técnica

Empresa/Administración financiadora: Fundación Aquila/fundación Iberdrola

Entidades participantes: Instituto de Investigación en Recursos Cinegéticos

Duración, desde: 01/06/2019 hasta: 30/11/2019

Investigador responsable: Ursula Höfle

Número de investigadores participantes: 2

PRECIO TOTAL DEL PROYECTO: 6.050 €

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**ATTACHMENT 6**

**NOMINATION OF DR. MELANIE JOSEFSSON**

*(Submitted by the Government of Sweden)*



**Ministry of the Environment**  
Natural Environment Division, Nature and  
Biodiversity Section

Nomination of candidate for the COP-appointed Councillor subject area  
of Invasive Species

Dear CMS Secretariat

Sweden would like to nominate Dr. Melanie Josefsson for the CoP-appointed Councillor for Invasive Alien Species. Melanie Josefsson is qualified to serve as Councillor as she has extensive experience in working with invasive alien species and biosafety through her work at the Swedish Environmental Protection Agency. We believe that Melanie Josefsson with her broad background in conservation issues and specific expertise in invasive alien species can contribute to CMS work with integrating Invasive Alien Species into CMS programmes and actions for conservation of migrating species.

Melanie Josefsson is well acquainted with the work of the CMS as she has been the CMS Swedish National Focal Point since 2017 and was privileged to participate in CMS CoP 13 in Gandhinagar, India.

Yours faithfully

Jan Terstad [signed]  
Deputy Director

Division for Natural Environment, Ministry of Environment, Stockholm

2021-02-13

### **Justification for the nomination of Melanie Josefsson as CMS Councillor for Invasive Alien Species**

Sweden would like to nominate Melanie Josefsson as Councillor for Invasive Alien Species. Dr. Melanie Josefsson has extensive experience and knowledge of Invasive Alien Species (IAS) and Biosafety through her work at the Swedish Environmental Protection Agency (SEPA) for the past 30 years.

Dr. Josefsson has focused on the conservation of species and habitats by developing policies, strategies and action plans for preventing the introduction, spread and impacts of IAS on biodiversity. She has also hands practical of initiating research projects for the eradication and control of the raccoon dog in northern Sweden, Norway and Finland.

Extensive experience in international and regional cooperation in the field of IAS has given Dr. Josefsson an understanding of the value of finding common understanding to enable lasting agreements that will be respected by all. She is currently the CMS national focal point for Sweden and had the privilege of attending the CMS COP13 in Gandhinagar. It is the experience of delving into the work of the CMS and experiencing the dedication of councillors and delegates to the conservation of threatened species, that has prompted Dr Josefsson to seek this position, as a way of contributing to this crucial work.

Working at the interface between science and policy, to directly apply research results to conservation actions, has been the red thread throughout her career, She began her career with doctoral studies on the geocology of the Northern Swedish mountains birch forests, as the love of mountains has been ingrained in her since her childhood in the highlands of Papua New Guinea. Her understanding of the dilemma of the encroachment of modern society on the way of life of traditional peoples was awakened through her post-doctoral research on the effects of the Sami people's reindeer herding on the ecology of the subarctic mountain region.

In 1998 Dr. Josefsson's inherent curiosity and flexibility led her to move from the SEPA position of research secretary into the field of invasive alien species, just as the CBD and other international and national biodiversity organizations became aware of the growing problem of IAS and moved to initiate IAS strategies and policies. The needs of SEPA and her knowledge of risk assessment processes lead her to also begin working with biosafety. As well as responsibility for IAS issues, she is also responsible for the issue of genetically modified organisms at all levels, from reviewing applications for field trials to international negotiations within the EU Working Party on



## International Environmental Issues, Biosafety and the CBD's Cartagena Protocol.

Dr. Josefsson has extensive experience in international and regional environmental agreements. She has been the Swedish focal point for the Convention of Biological Diversity's work with IAS since 2001 and has contributed to this work from the development of the Guiding Principles on IAS in 2001 to guidances on avoiding the introduction of IAS through trade in 2018. Her latest contribution was as a member of the *ad hoc* technical working group on IAS which has produced Elements of Guidance on IAS and climate change, which will be discussed at the upcoming CBD COP 15 and SBSTTA-24. She is also the Swedish NFP for the European Convention on the Conservation of Fauna and Flora (Bern Convention) and has served in the convention's group of experts on IAS for some time. Dr. Josefsson was also privileged to serve on the European Plant Protection Organisation's Panel on IAS and contributed to developing risk assessments on invasive alien plant species and the Prioritization Process for Risk Analysis.

The concern for the increasing impacts on biodiversity and human health through the spread of alien pathogens and parasites and alien species that are vectors for spread of pathogens and parasites, led to her to develop, together with the IUCN's Invasive Species Specialist Group, a proposal to be presented at coming CBD SBSTTA-24 and COP 15 requesting the CBD to work with this issue. Although she is not a veterinarian, she has working contacts through her extensive contact net, with the Swedish Veterinary Agency and with European IAS researchers working with the spread of parasites and pathogens vectored by IAS. Experience with the Nordic and EU LIFE projects on the raccoon dog has reinforced the message how important eradication of IAS predators is to prevent damage to birdlife in archipelagos and subarctic wetlands, but also to prevent the spread of parasites that may harm wildlife and human health.

Although her expertise initially was in impacts of IAS on freshwater species and habitats, Dr. Josefsson has gained expertise and knowledge of the consequences of IAS also in marine and terrestrial environments through her work developing the Swedish Strategy on Invasive Alien Species, compilation and maintenance of the Swedish database on IAS and as co-coordinator in developing the European Network on Invasive Alien Species (NOBANIS) gateway to IAS [www.nobanis.org](http://www.nobanis.org) funded by the Nordic Council of Ministers. Her continued participation in Nordic, European and international projects on IAS, most recently the Arctic Invasive Alien Species Strategy (ARIAS) project under the Council of Arctic Fauna and Flora has deepened this expertise.

3(3)

Dr Josefsson has honed her skills in holding digital meetings and distance working during this year of the pandemic, which will serve her well, should she be selected as CMS councilor on IAS. Her concern for the increasing threat of IAS on species and habitats is a strong driving force for her commitment to achieving the CMS goals of preserving migrating species and their habitats throughout their migratory routes.

Dr. Melanie Josefsson  
Ölandsresan 143  
757 55 Uppsala, Sweden

2021-02-13

CMS Secretariat  
Marco Barbieri  
Platz der Vereinten Nationen 1  
53113 Bonn, Germany

Dear Mr Barbieri;

I am grateful to the Swedish government for their nomination of me as CMS Councillor for IAS. The Swedish Environmental Protection Agency, my employer, has agreed for me to dedicate working time to the performance of the duty of CMS Councillor for IAS, should I be selected.

I assure you, that I will perform the duties of the Councillor as specified in the Terms of Reference with dedication and enthusiasm during this intersessional period leading to 14<sup>th</sup> meeting of the CMS Conference of the Parties.

With best regards,



Melanie Josefsson

2021-02-13

CURICULUM VITAE

1. NAME: MELANIE KAY JOSEFSSON, née Wenger
2. PLACE AND DATE OF BIRTH:
3. NATIONALITY:
4. EDUCATION: Ph.D. in Physical Geography, Uppsala University, Sweden, 1990  
Master of Science Degree in Physical Geography, Uppsala University, Sweden, 1983  
Postgraduate studies in Limnology, Uppsala University, Sweden, 1978  
Bachelor of Arts Degree in Geography, Earth and Marine Sciences and Anthropology, California State University, Dominguez Hills, California, U.S.A., 1977.
5. LANGUAGES: English: Mother tongue  
Swedish: Fluent
6. MEMBERSHIP IN EXPERT GROUPS: Conservation of Arctic Fauna and Flora, Arctic Invasive Species Strategy and Action Plan Steering Committee (ARIAS). 2016 – present  
WPIEI Biosafety, Swedish representative, 2013 – present.  
Cartagena Protocol on Biosafety, National Focal Point Biosafety Clearing House Mechanism, 2011 – present.  
Convention on Biological Diversity, National Focal Point for Invasive Alien Species, 2002 – present.  
Convention on the Conservation of Migratory Species of Wild Animals, National Focal Point, 2018 – present.  
Convention on the Conservation of European Fauna and Flora, National Focal Point, 2019 – present. Expert group on Invasive Alien Species, 2004 – present. Vice-chair 2016 - 2019,

European Commission Committee on IAS and Scientific Forum Regulation 1143/2014, Swedish Representative, CGBN Working Group on IAS 2016 – 2017.

European Network on Invasive Alien Species (NOBANIS) Project Co-coordinator and National Focal Point 2004 – present.

IUCN Invasive Alien Specialist Group

European Plant Protection Organisation Expert Group on Invasive Alien Species, 2007 – 2019.

European Environment Agency SEBI 2010 Expert Group on Invasive Alien Species 2005 – 2007.

## 7. EMPLOYMENT RECORD:

1998 – present

Swedish Environmental Protection Agency,

### POSITION HELD:

Senior Technical Officer, Invasive Alien Species and Genetically Modified Organisms

### DESCRIPTION OF DUTIES:

Coordinate international work on invasive alien species and their effects on biodiversity, human, plant and animal health and socioeconomic values. Coordinate international, European Union and national work on environmental effects of Genetically Modified Organisms including Swedish member in EU Working Party of the Environment, Biosafety. Swedish delegate to the Convention on Biological Diversity's COP and SBSTTA 2001 – present with responsibility for the topics IAS and Synthetic Biology. Swedish delegate to Cartagena Protocol COP-MOP 7 – 10. National Focal Point for Convention on Conservation of Migratory Species and Convention on Conservation of European Fauna and Flora.

POSITION HELD:  
2012

European Environment Agency, Copenhagen.  
National Expert on Invasive Alien Species

POSITION HELD:  
1991 – 1998

Swedish Environmental Protection Agency.  
Research Department. Research Secretary,  
Scientific Committee on Freshwater, MATS  
project on Soil Biodiversity, Wetlands Project

POSITION HELD:

1990 – 1991

Consultant, Expert in Environment and Ecology, Swedish Space Corporation. Development of Musi River Basin, Sumatra

POSITION HELD:

1990 – 1991

Researcher, Departments of Physical and Cultural Geography, Uppsala University

POSITION HELD:

1985 – 1990

Research Assistant, Uppsala University  
Department of Physical Geography

Other interests:

Student in Acupuncture at Acupuncture Academy, Stockholm 2018 – present.

Medical Qi Gong instructor and member of Swedish Board of Medical Qi Gong, Green Dragon 2009 – 2020.

Avid student of MOOCs on Chinese History, Philosophy and Literature

Quilting and hiking in the forest

## 8. PUBLICATIONS

- Roy, H., et.al 2017. Developing a framework of minimum standards for the risk assessment of alien species. *Journal of Applied Ecology* 2018:526-538
- Groom, et.al 2017. Seven recommendations to make your invasive alien species data more useful. *Frontiers in Applied Mathematics and Statistics*. June 30. 2017. <https://doi.org/10.3389/fams.2017.00013>
- Rabitsch, W., Genovesi, P., Scalera, R., Biala, K., Josefsson, M., Essl, F. 2016. Developing and testing alien species indicators for Europe. *Journal for Nature Conservation* 29:89-96.
- Brunel, S., Branquart, E., Fried, G., van Valkenburg, J., Brundu, G., Starfinger, U., Buholzer, S., Uludag, A., Josefsson, M., and Baker, R., 2010. The EPPO prioritization process for invasive alien plants. *Bulletin, OEPP/EPPO Bulletin* 40:407 - 422.
- Nentwig, W, & Josefsson, M., 2010. Introduction. *In: Roques, A., Kenis, M., Lees, D., Lopez-Vaalmonde, C., Rabitsch, W., Rasplus, J-V, Roy, D. (eds). Alien Terrestrial Arthropods of Europe*. Biorisk 4. Biodiversity and Ecosystem Risk Assessment.
- Vilá, M., Basnou, C., Pysek, P., Josefsson, M., Genovesi, P, Gollasch, S, Nentwig, W., Olenin, S., Rocques, A., Roy, D., Hulme, P, and DAISIE partners. 2010. How well do we understand the impacts of alien species on ecosystem services? A pan-European, cross-taxa assessment. *Frontiers in Ecology* 8:135-144 Doi:10.1890/080083.
- DAISIE, 2009. Handbook of Alien Species in Europe. *Invading nature: Springer series in Invasion Ecology* 3.
- Lambdon, P., PW, Pysek, P, Basnou, C, Hejda, M, Arianoutsos, M, Essl, F, Jarosik, V, Pergl, J, Winter, M, Anatasiu, P, Andriopoulos, P, Bazov, I, Brandu, G, Celesti-Gradow, L, Chassot, P, Delipetrou, P, Josefsson, M, Kark, S, Klotz, S, Kokkoris, Y, Kühn, I, Marchante, H, Perglova, I, Pino, J, Vilá, M, Zikos, A, Roy, D, Hulme, P.. 2008. Alien flora of Europe: species

- diversity, temporal trends, geographical patterns and research needs. *Preslia* 80:101-149.
- Laikre, L., Larsson, L., Palmé, A., Charlier, J., Josefsson, M., & Ryman, N., 2008. Potentials for monitoring gene level biodiversity: using Sweden as an example. *Biodiversity and Conservation* DOI 10.1007/s10531-008-9335-2.
- Naturvårdsverket. 2008. Swedish National Strategy and Action Plan on Alien Species and Genotypes. Nationell strategi och handlingsplan om främmande arter och genotyper. *Naturvårdsverket rapport 5910*. In Swedish with English summary.
- Laikre, L., Palmé, A., Josefsson, M., Utter, F., Ryman, N., 2006. Release of alien populations in Sweden. *AMBIO* 35:255-261.
- Jonasson, C., Gordon, J.E., Kocianova, M., Josefsson, M., Dvorak, I.J., Thompson, B.A. 2005. Links between geodiversity and biodiversity in European mountains: case studies from Sweden, Scotland and the Czech Republic. *In: Thompson, D.B.A., Price, M.F., and Galbraith, C.A., (eds). Mountains of Northern Europe.* pp 57-70.
- Josefsson, M. & Andersson, B., 2001. The environmental consequences of alien species in the Swedish lakes Mälaren, Hjälmaren, Vänern and Vättern. *AMBIO* 30:496-502.
- Josefsson, M. 1999. The introduction of alien species in Swedish lakes and rivers. Introduktion av främmande arter i svenska sjöar och vattendrag. *Naturvårdsverket rapport 4941*. In Swedish with English summary.
- Josefsson, M. 1998. Alien Species in Swedish Lakes and Rivers. Främmande arter i svenska sjöar och vattendrag. *Sjöar och vattendrag. Årsskrift från miljöövervakning 1997:23-29*. In Swedish with English summary.
- Rundquist, S, Torstensson, L. , Josefsson, M. 1998. Integrated soil analysis. A Swedish research project. *AMBIO* 28:2-3
- Rundquist, S. & Josefsson, M. 1993. Soil Biological Variables in Environmental Hazard Assessment. Testsystem för markmiljö (MATS) Slutrapport från Naturvårdsverkets forskningsprogram. *Naturvårdsverket rapport 4274*. In Swedish with English summary.
- Bäck, L, Hedblom, M., Josefsson, M, Rydén, A. 1992. Reindeer herding in conflict and cooperation. A geographic land use and simulation study. Rennäring i konflikt och samverkan. En geografisk markanvändnings- och simuleringsstudie. *Forskningsrapporter från Kulturgeografisk institutionen, Uppsala universitet* Nr. 104. In Swedish with English summary.
- Josefsson, M. 1991. The Geoecology of Subalpine Heaths, Abisko, Northern Sweden. *UNGI rapport* Nr 78. Doctoral thesis. Uppsala University Department of Physical Geography.
- Josefsson, M. 1990. Ground temperatures in a mountain valley, Abisko, Northern Sweden. *Geografisk annaler* 72A:179-190.
- Bäck, L., Josefsson, M., Strömquist, L., 1989. Land capability, Recreational Land-use and Conservation strategies in a sensitive mountain environment. A method study. *UNGI rapport* Nr 78, Uppsala Universitet.
- Josefsson, M. 1988. Subalpine heaths as an indicator of a periglacial environment. *Norsk geografisk tidskrift* 42: 215-233.

**ATTACHMENT 7**

**NOMINATION OF DR. SEBATAOLO RAHLAO**  
*(Submitted by the Government of South Africa)*



## Marco Barbieri

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**From:** Malta Qwathekana <MQwathekana@environment.gov.za>  
**Sent:** Tuesday, 26 January 2021 16:44  
**To:** cms.secretariat@cms.int [CMS]; Marco Barbieri  
**Subject:** RE: CMS Notification 2021/001: Call for nominations- New COP-appointed Councillor subject Invasive Species/Appel à candidatures- nouveau conseiller nommé par la COP Espèces envahissantes/Convocatoria– Consejero designado por la COP para las especies invas  
**Attachments:** Rahlao SJ\_CMS COP-COUNCILLOR\_INVASIVE SPECIES\_acceptance letter.pdf; RAHLAO SJ\_CMS COP-Councilor\_Invasive species\_CV.pdf; BIOGRAPHY - Rahlao SJ\_CMS COP-Councillor\_invasive species\_justification.docx

Dear Sir/Madam

As a Scientific Councillor and a CMS National Focal Point for the Republic of South Africa I hereby submit South Africa's nomination for the COP appointed Councillor for Invasive Species as per the notification received. Dr S. Rahlao is in one of our entities, the South African National Biodiversity Institute (SANBI) and a well recognised expert in Invasive species at a National, Regional and global levels on the subject. He has led the authorship of chapters in the IPBES assessments related to the subject and is a dedicated and committed scientist with substantial scientific research experience. I have no doubt should he be selected, the Convention will benefit from her knowledge and dedication.

He was consulted for this nomination and he accepted the nomination as per the attached confirmation letter that he submitted. I also submit his CV and biography for your kind consideration

Best Regards  
Malta Qwathekana

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**From:** CMS Secretariat [mailto:cms.secretariat@cms.int]  
**Sent:** Monday, 18 January 2021 14:14  
**To:** CMS Secretariat  
**Subject:** CMS Notification 2021/001: Call for nominations- New COP-appointed Councillor subject Invasive Species/Appel à candidatures- nouveau conseiller nommé par la COP Espèces envahissantes/Convocatoria– Consejero designado por la COP para las especies invasoras

Notification to the Parties:

The CMS Secretariat solicits nominations of candidates for the COP-appointed Councillor subject area of invasive species.

All CMS Notifications can be accessed online at <http://cms.int/en/news/notifications>

Kind regards,

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Notification aux Parties:

Le Secrétariat de la CMS sollicite des nominations de candidats au poste de Conseiller nommé par la COP pour le domaine de compétence « Espèces envahissantes ».

Toutes les notifications de la CMS sont accessibles en ligne sur <http://www.cms.int/fr/news/notifications>

Meilleures salutations,

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Notificación a las Partes:

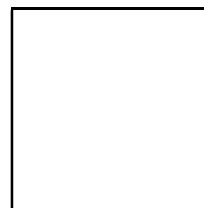
La Secretaría de la CMS solicita nominaciones de candidatos para el puesto de Consejero designado por la COP para el área temática 'Especies invasoras'.

Todas las notificaciones de la CMS están disponibles en línea en: <https://www.cms.int/es/news/notifications>.

Cordialmente,

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**UN Environment**  
**Convention on Migratory Species (CMS)**

United Nations Campus in Bonn  
Platz der Vereinten Nationen 1 • 53113 Bonn • Germany  
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## DR. SEBATAOLO RAHLAO

Director: Biodiversity Evidence – South African National Biodiversity Institute (SANBI) – – Pretoria National Botanical Garden – Herbarium Building – Pretoria – South Africa –  
(office) – E-mails:

### **Justification on what the candidate would bring to the position**

At the 4<sup>th</sup> Sessional Committee meeting of the CMS Science Council, new COP-appointed councillor positions were recommended in a paper presented at the meeting to further advance the work of the Convention. One of the specialist areas recommended for the next triennium was an expert to lead a programme of work dealing with the impacts of invasive species (animals, plants and diseases) on a wide range of migratory species, especially on oceanic islands but increasingly on continental areas as new unwanted organisms spread their range globally. South African has been in the forefront of Invasives alien species research and capacity building including the assessment of the status and the impacts of these species on livelihoods, health, biodiversity and ecosystems, and the economy.

### **Highlights for Dr. Sebataolo Rahlao – CMS COP – Councillor – Invasive species**

1. Dr. Rahlao has a solid academic background in environmental science, including biodiversity and its conservation up to PhD level. His PhD thesis focused on invasive alien grasses and their interactions with global changes such as climate change and land use changes.
2. He has led a team that developed the first national status report on biological invasions in South Africa. This was the first ever report to comprehensively assess the status of all aspects of biological invasions at a national level – ISBN: 978-1-928224-18-1. This report included the status of pathways of introduction and spread; the status of invasive alien species (animals, plants, microbes, etc.) and their impacts; the status of areas invaded; and the effectiveness of interventions (legislation, control measures, advocacy, etc.).
3. He has an extensive working knowledge in environmental sustainability and relevant legislation and policies in South Africa including participation at environment related multilateral agreements. He was part of the South African delegation at the UNFCCC in 2010 (Cancun, Mexico), 2011 (Durban, South Africa) and 2012 (Doha, Qatar) where he provided technical support on climate change.
4. He was the lead author of Chapter 6 and a contributing author of Chapter 4 of the Regional Assessment Report on Biodiversity and Ecosystems services for Africa of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).
5. He is now the coordinating lead author of Chapter 2 – *Global Trends and Status on Invasive Species* – of the thematic assessment of invasive alien species and their control. Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). This assessment also covers an assessment of trends in invasive species and their impacts on good quality of life (GQL) globally. The assessment includes the status of One Health concept as part of GQL including diseases and pandemics.
6. Dr. Rahlao leads a team of experts undertaking assessments and research on biosecurity and invasive species, biodiversity economy and threatened or protected species under CITES to provide evidence for policy and decision-making in South Africa. He leads teams

undertaking projects on early detection and rapid response (EDRR), risk analyses, research, etc.

7. He has lead and contributed to many national science-policy interface forums and contributed to many national positions for environment based multilateral agreements. E.g., CITES, CBD, UNFCCC, UNCCD, etc.
8. He has published many peer-reviewed papers on invasive species impacts and led and developed their national and global assessments. He has developed capacity through lecturing and research positions at Universities in South Africa and has supervised postgraduate students in this regard. He has presented at many national and international conferences on invasive species including interviews with TV and Radio stations on this topic.
9. His understanding of this topic both at the national, regional and global level including the networks and passion he has for this subject makes him ideal as a candidate to take on this new position on the CMS science council.
10. His knowledge, passion and ability to communicate at different levels (school kids, university students, researchers and experts, community forums, parliamentary members) will assist the CMS in reaching out to many countries to avert the impacts of invasive species on migratory species.

## DR. SEBATAOLO RAHLAO

Director: Biodiversity Evidence – South African National Biodiversity Institute (SANBI) – Pretoria National Botanical Garden – Herbarium Building — Pretoria – South Africa – T (office) – E-mails: /

20 January 2021

To:

Ms Nopasika Malta Qwathekana  
CMS Scientific Councillor for Republic of South Africa

Senior Policy Advisor – International Advisory Services  
Department of Environment, Forestry and Fisheries  
Biodiversity and Conservation Branch  
Environment House  
473 Steve Biko Street  
Pretoria  
0001  
Republic of South Africa

Dear Ms Qwathekana,

With this note I would like to sincerely thank the Government of the Republic of South Africa for nominating me to the role of the COP-appointed Councillor subject area of Invasive Species (including disease, feral animals, insects, marine pests and weeds). If my nomination is successful, I confirm with this letter to accept the position and commit to all the duties assigned to me in this regard.

I have studied and worked in this field in the last decade and have published and mentored postgraduate students in this regard. My work has primarily been on science-policy interface through national and international assessments, monitoring and primary research. I have led a team that developed the first national status report on biological invasions in South Africa in 2018. I have also contributed to the IPBES ([www.ipbes.int](http://www.ipbes.int)) regional (Africa) assessment on biodiversity and currently leading chapter two (Status and trends in invasive alien species) of the global assessment on invasive species.

I have provided further details of my expertise and experience in a separate document and confirm that I will commit my time and efforts for the duration of my appointment in this position. I am also happy for additional nominations to any other function you deem relevant for my expertise, skills and experience at the CMS.

Yours sincerely,



Sebataolo Rahlao

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## DR. SEBATAOLO RAHLAO

Director: Biodiversity Evidence – South African National Biodiversity Institute (SANBI) – Pretoria National Botanical Garden – Herbarium Building — Pretoria – South Africa – (office) – /

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### EDUCATION

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- 2006 – 2009: Doctor of Philosophy (**PhD**) – Conservation Ecology – University of Stellenbosch, South Africa. Thesis: *Current and future vulnerability of South African ecosystems to perennial grass invasion under global change scenarios.*
- 2004 – 2005: Master of Science (**MSc.**) – Conservation Biology (coursework and dissertation) – University of Cape Town, South Africa. Thesis: *Long-term vegetation change in the semi-arid Succulent Karoo of South Africa.*
- 2003: Bachelor of Science (Honours) (**BSc. Hons.**) – Environmental & Geographical Science – University of Cape Town, South Africa. Thesis: *Land use change and its impact on land degradation in the Tygerberg Hills, near Cape Town, South Africa*
- 1998 – 2002: Bachelor of Science (**BSc.**) – Biology & Physical Geography (double major) – National University of Lesotho, Lesotho. Theses: Mini-thesis: 1. *Plants in unique habitats and their conservation; a case study of Aloe ferox in the Senqu valley in Lesotho.* Mini-thesis 2. *Landscaping and its impact on the NUL, Roma, Lesotho campus microclimate.*

### PROFESSIONAL EXPERIENCE

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- September 2020 – January 2021: **Acting Chief Director – Biodiversity Assessment and Knowledge Generation**, South African National Biodiversity Institute (SANBI), Pretoria National Botanical Gardens, Pretoria, South Africa – [www.sanbi.org](http://www.sanbi.org).
- December 2014 – present: **Director – Biodiversity Evidence**, South African National Biodiversity Institute (SANBI), Pretoria National Botanical Gardens, Pretoria, South Africa – [www.sanbi.org](http://www.sanbi.org).
- May 2013 – November 2014: **Specialist Advisor** (Director level), Climate Change Monitoring & Evaluation – Department of Environmental Affairs, Government of the Republic of South Africa, Pretoria – [www.environment.gov.za](http://www.environment.gov.za).
- May 2011 – April 2013: **Researcher** (Lecturer level), Energy Research Centre – Department of Mechanical Engineering, University of Cape Town, Cape Town, South Africa – [www.erc.uct.ac.za](http://www.erc.uct.ac.za).
- December 2009 – April 2011: **Postdoctoral Researcher**, Energy Research Centre – Department of Mechanical Engineering, University of Cape Town, Cape Town, South Africa – [www.erc.uct.ac.za](http://www.erc.uct.ac.za).
- May – June 2005: **Programme Assistant**, Global Invasive Species Programme (GISP), South African National Biodiversity Institute (SANBI), Cape Town – [www.GISP.org](http://www.GISP.org).

### OTHER RELEVANT PROFESSIONAL POSITIONS

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- 2016 – present: **Lecturer (part-time) and Research Associate**, The FitzPatrick Institute, Department of Biological Sciences, University of Cape Town, South Africa – [www.fitzpatrick.uct.ac.za](http://www.fitzpatrick.uct.ac.za). Invasion ecology module – Conservation Biology Masters course.
- 2019 – present: **Coordinating Lead Author – Chapter 2 – Global Trends and Status on Invasive Species**. Deliverable 3(b)(ii): Global assessment on invasive alien species and their control. Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) – [www.ipbes.net](http://www.ipbes.net).

2017 – present: **Core-Research team member**, DST-NRF Centre of Excellence for Invasion Biology, Department of Botany and Zoology, University of Stellenbosch, South Africa – [www.sun.ac.za/cib](http://www.sun.ac.za/cib).

2015 – 2018: **Lead Author – Chapter 6: Options for governance, institutional arrangements and private and public decision making across scales and sectors**, Deliverable 2(b): Regional assessment of biodiversity and ecosystem services for Africa, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) – [www.ipbes.net](http://www.ipbes.net).

**Contributing Author – Chapter 4: Direct and indirect drivers of change in biodiversity and nature's contributions to people**. Deliverable 2(b): Regional assessment of biodiversity and ecosystem services for Africa, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) – [www.ipbes.net](http://www.ipbes.net).

## RELEVANT PUBLICATIONS

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Egoh B, Ntshotsho P, Maela M, Blanchard R, Lacour M. and **Rahlao S** (2020) *Setting the scene for achievable post-2020 Convention on Biological Diversity targets: A review of the impacts of invasive alien species on ecosystem services in Africa*. Journal of Environmental Management 261 (2020) – <https://doi.org/10.1016/j.jenvman.2020.110171>.

Mbedzi M, Tshisikhawe P, Sinthumule I and **Rahlao S** (2019) *The rate of recolonization by native plant species after the eradication of the invasive alien plant species (Populus alba L.) in the Limpopo Province, South Africa*. Ecology, Environment and Conservation 25 (4):1673 – 1678.

Mastrángelo ME, Pérez-Harguindeguy N, Enrico L, Bennett E, Lavorel S, Cumming GS, Abeygunawardane D, Amarilla LD, Burkhard B, Egoh BE, Friskhoff L, Galetto L, Huber S, Karp DS, Ke A, Kowaljow E, Kronenburg-García A, Locatelli B, Martín-López B, Meyfroidt P, Mwampamba TH, Nel J, Nicholas KA, Nicholson C, Oteros-Rozas E, **Rahlao SJ**, Raudsepp-Hearne C, Ricketts T, Shrestha UB, Torres C, Winkler KJ and Zoeller K. (2019) *Key knowledge gaps to achieve global sustainability goals*. Nature Sustainability 2: 1–7. <https://doi.org/10.1038/s41893-019-0412-1>.

Wilson JR, Faulkner KT, **Rahlao S**, Richardson DM, Zengeya T, van Wilgen B (2018) *Indicators for Monitoring biological invasions at a national level*. Journal of Applied Ecology, 55 (6): 2612 – 2620.

Nyingi W, Oguge N, Dziba L, Chandipo R, Didier TA, Gandiwa E, Kasiki S, Kisanga D, Kgosikoma O, Osano O, Tassin J, Sanogo S, von Maltitz G, Ghazi H, Archibald S, Gambiza J, Ivey P, Logo PB, Maela MA, Ndarana T, Ogada M, Olago D, **Rahlao SJ**, and van Wilgen B. *Chapter 4: Direct and indirect drivers of change in biodiversity and nature's contributions to people*. In IPBES (2018): The IPBES regional assessment report on biodiversity and ecosystem services for Africa. Archer E, Dziba L, Mulongoy KJ, Maela MA, and Walters M. (eds.). Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany, pp. 207 – 296. [www.IPBES.net](http://www.IPBES.net).

Stringer LC., Osman-Elasha B, DeClerck F, Ayuke FO, Gebremikael MB, Barau AS, Denboba MA, Diallo M, Molua EL, Ngenda G, Pereira L, **Rahlao SJ**, Kalemba MM, Ojino JA, Belhabib D, Sitas N, Strauß L, and Ward C. *Chapter 6: Options for governance and decision-making across scales and sectors*. In IPBES (2018): The IPBES regional assessment report on biodiversity and ecosystem services for Africa. Archer E, Dziba L, Mulongoy KJ, Maela MA, and Walters M. (eds.). Secretariat of the

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany, pp. 353 – 414. [www.IPBES.net](http://www.IPBES.net).

- Rahlao S**, Faulkner K, Van Wilgen BV, Wilson J and Zengeya T. Chapter 8: *Knowledge and Information Gaps in understanding the status of biological invasions*. In Van Wilgen BW & Wilson, JR (Eds.) 2018. The status of biological invasions and their management in South Africa in 2017. DOI:10.13140/RG.2.2.31003.52002. ISBN 978-1-928224-18-1.
- Van Wilgen BV, Wilson J, Faulkner K, Zengeya T and **Rahlao S**. Chapter 9: *Key policy-relevant messages*. In Van Wilgen BW & Wilson, JR (Eds.) 2018. The status of biological invasions and their management in South Africa in 2017. DOI:10.13140/RG.2.2.31003.52002. ISBN 978-1-928224-18-1.
- Van Wilgen BV, Wilson J, **Rahlao S** and Zengeya T. Chapter 1: *Introduction*. In Van Wilgen BW & Wilson, JR (Eds.) 2018. The status of biological invasions and their management in South Africa in 2017. DOI:10.13140/RG.2.2.31003.52002. ISBN 978-1-928224-18-1.
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- Rojas A, **Rahlao S**, Alfaro M, Engel W, Dubeux C, Gomez C, Gutman V, Jarvis A, Kebreab E, Rosales R (2014). *An assessment of mitigation potential of GHG in the agriculture sector: The case of Argentina, Brazil, Chile, Colombia, Peru and South Africa*. MAPS Programme – [www.mapsprogramme.org](http://www.mapsprogramme.org).
- Rahlao S**, Milton SJ, Esler KJ & Barnard P (2014) *The performance of Pennisetum setaceum seedlings across a climatic gradient in South Africa* – South African Journal of Botany, 91: 43 – 48.
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- Rahlao S** (2013) *Agricultural emissions mitigation: understanding modelling and policy implications*, A POLICY BRIEF, Mitigation Action Plans and Scenarios (MAPS), MAPS Programme, Cape Town, South Africa – [www.mapsprogramme.org](http://www.mapsprogramme.org).
- Boyd A, Rennkamp B, Winkler H, Larmour R, Letete T, **Rahlao S** & Trikam A (2012). *South African approaches to measuring, reporting and verifying: A scoping report*. Prepared for the World Resources Institute as part of the Measurement and Performance Tracking Project supported by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Federal Republic of Germany.
- Rahlao S**, Mantlana B, Winkler H & Knowles T (2012) *South Africa's national REDD+ initiative: assessing the potential of the forestry sector on climate change mitigation*. Environmental Science and Policy, 17: 24 – 32.
- Prasad G, Bouille M, Boyd A, **Rahlao S**, Wlokas V & Yaholnitsky I. (2011) *Energy, water and climate change in Southern Africa: What are the issues that need further investment and research?* A report prepared for the International Development and Research Commission (IDRC) by the Energy Research Centre, University of Cape Town.



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- Rahlao S**, Esler KJ, Milton SJ & Barnard P (2010) *Nutrient addition and moisture promote the invasiveness of Crimson fountain grass (Pennisetum setaceum)*. Weed Science, 58: 154 – 159.
- Rahlao S**, Milton SJ, Esler KJ, Wilgen BWV & Barnard P (2009) *Effects of invasion of fire-free arid shrublands by a fire-promoting invasive alien grass (Pennisetum setaceum) in South Africa*. Austral Ecology, 34: 920 – 928.
- Rahlao S**, Hoffman MT, Todd SW & McGrath K (2008) *Long-term vegetation change in the Succulent Karoo, South Africa following 67 years of rest from grazing*. Journal of Arid Environments, 72: 808 – 819.
- Milton SJ, Dean WRJ & **Rahlao S** (2008) *Evidence for induced pseudo-vivipary in Pennisetum setaceum (fountain grass) invading a dry river, arid Karoo, South Africa*. South African Journal of Botany, 74: 348 – 349.
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## REFEREES

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### 1. Dr. Phoebe Barnard

✉ The Conservation Biology Institute (CBI),  
University of Washington –

### 2. Dr. Brian Mantlana

✉ Council for Scientific and Industrial  
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✉ Faculty of Science, Centre for Drug  
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University of Cape Town,

### 4. Prof. Karen J. Esler

✉ Dept. of Conservation Ecology &  
Entomology, Stellenbosch University