



Thematic Group on Ecosystem Governance Newsletter January 2019

Welcome to the first newsletter of the Ecosystem Governance Thematic Group of CEM. Our group is one of the newest in the CEM. For the first couple of years, I have chaired alone this group. I am very pleased to now be joined by Tomas Zuklin from Vietnam who has been a wonderful addition as co-chair of the Group. He is instrumental in the preparation of this newsletter. You will hear more and more from him over the next few months.

We have many new ideas and activities planned for 2019-2020. I hope that you will be encouraged to contribute to the work on Ecosystem Governance

Enjoy!

Liette Vasseur



Liette at Petra World Heritage Site, Jordan, fall 2018



Dear EGTG members, it is my pleasure to address you in our newly established newsletter! Our group is truly global, we have over 300 members now (and growing) all around the world. I am currently based in Vietnam and from here I coordinate activities together with our Chair, Liette Vasseur. We have big plans for our group in 2019, we hope to focus more on engaging with you, our members, in order to advance both theory and practice of ecosystem governance as well as to promote delivering IUCN's One Programme. We will be reaching out to you very often and we hope that your participation will produce valuable results and will help to advance our cause well beyond IUCN itself. So stay tuned, enjoy year 2019 and a Lunar Year of a Pig too!

Tomas Zuklin

<u>Planning for drought and food emergency recurrence at the Lesotho-South Africa border</u> African Mountain Partnership Case study, 2018.

Lesotho is a land-locked, mountainous country and its only neighbour is South Africa. Of the small population (two million), about a quarter live and work in South Africa, while a large proportion live in the remote, high altitude areas, and are vulnerable to the impact of drought. Lesotho is experiencing droughts and food emergencies with increasing frequency and has been assisted by international donor aid for some time. Lesotho's vulnerability should be a stronger planning signal for the border region with South Africa and southern Africa as a whole. The overall aim of this study was to probe the disaster preparedness of the South African eastern Free State province and border municipalities in response to disaster risk signals from Lesotho. This paper shows that both disaster management planning for the municipal and provincial governments in this South-Africa Lesotho border region is weak and fails to acknowledge a potential for border complexity linked to disasters in Lesotho. Lessons learned from the 2014/2017 El Ni-ño-induced drought that impacted the wider SADC region now need to be captured and factored into South African municipal disaster planning in this region.

Sue Taylor (PhD)

AfroMont Co-ordinator

Research Network for Global Change in African Mountains

http://mri.scnatweb.ch/en/networks/mri-africa

Centre for Environmental Studies (CFES)

University of Pretoria, South Africa.

Email: staylor@zoology.up.ac.za

From the United States, our group member Ahjond Garmestani from US Environmental Protection Agency

Recent publications of his team on ecosystem governance of interest:

Craig, R.K., A.S. Garmestani, C.R. Allen, C.A. Arnold, H. Birgé, D.A. DeCaro, A.K. Fremier, H. Gosnell and E. Schlager. 2017. Balancing stability and flexibility in adaptive governance: an analysis of tools available in U.S. environmental law. Ecology and Society 22(2):3.https://doi.org/10.5751/ES-08983-220203

DeCaro, D.A., C.A. (T.) Arnold, E.F. Boamah and A.S. Garmestani. 2017. Understanding and applying principles of social cognition and decision making in adaptive environmental governance. Ecology and Society 22 (1):33. https://doi.org/10.5751/ES-09154-220133

DeCaro, D.A., B.C. Chaffin, E. Schlager, A.S. Garmestani and J.B. Ruhl. 2017. Legal and institutional foundations of adaptive environmental governance. Ecology and Society 22(1):32.

https://doi.org/10.5751/ES-09036-220132

Additionally, US EPA offers a post-doctoral position (open only for US citizens) with open-start date:

Title: Governance of social-ecological systems

Reference Code: EPA-ORD-NRMRL-LMMD-2018-08

Further information about the position can be found at https://www.zintellect.com/Opportunity/Details/ EPA-ORD-NRMRL-LMMD-2018-08

News from Japan...

Yamada, Y., Itagawa, S., Yoshida T., Fukushima, M., Ishi J., Nishigaki, M., Ichinose, T. (in press) Predicting the distribution of released Oriental White Stork (*Ciconia boyciana*) in central Japan. Ecological Research.

The native Oriental White Stork population in Japan was extirpated in 1971. Six juveniles were transferred from Russia in 1985, and the release has started since 2005. Approximately 150 individuals live in the wild. We tracked four individuals for two years using the satellite system which were released in Fukui Prefecture, central Japan. We identified environmental factors that affect the distribution of the Oriental White Stork and produced the first predictive spatial distribution map of reintroduced individuals. Our results highlight the proportion of area of rice paddies as alternative wetland habitat as the most influential variable affecting the distribution positively. Landscape diversity represented by a complex mosaic of paddies and forest is also important for the species, as total length of paddy–forest edge also had a positive effect on habitat suitability. Then, we have an idea of introducing ecosystem-based disaster risk reduction (Eco-DRR) regarding the Oriental White Stork. Most of their potential habitats overlap with flood and landslide risk areas where many people still live. We are facing depopulation especially in rural areas, therefore we can give up using hazard risk areas and restore their habitats.

<u>The Star Trek Program: catalyzing investment for biodiversity conservation and sustainable development in mainland Palawan Forest Corridor</u>

In 2008 a consortium of funding institutions in the Philippines was formed to optimize the resources, investments, and expertise in addressing the socio-economic-political and climatic drivers underpinning the degradation of critical key biodiversity areas (KBAs) in the country. The Foundation for the Philippine Environment (FPE), Foundation for a Sustainable Society, Inc. (FSSI), and Peace and Equity Foundation (PEF) have collaborated and supported the program "Catalyzing Investment for Poverty Reduction and Sustainable Development" in northern mainland Palawan. The program is commonly called "Star Trek Program" in reference to the spaceship "ENTERPRISE" of interstellar travel. As conservation trade-off (trade-off of biodiversity and livelihood), the "Star Trek Program" underscores the strategic role of developing climate-smart and biodiversity-friendly production systems and social enterprises in biodiversity conservation and sustainable development in the country. The Philippine Tropical Forest Conservation Foundation, Inc. (PTFCFI) joined the "Star Trek" consortium in 2018.

In partnership with Palawan Center for Appropriate Rural Technology (PCART) as the implementing partner of the program and the local govern units (LGUs), the "Star Trek Program" focuses on San Vicente-Taytay-Roxas Forests and Cleopatra's Needle KBAs (Figure 1) which connect the three protected areas under the National Integrated Protected Areas System (NIPAS) Act of 1992 (RA 7586 of 1992)-- El Nido Managed Resource Protected Area, Malampaya Sound Protected Landscape and Seascape, and Puerto Princesa Subterranean Natural Park. Encompassing 185,000 hectares of forestlands that provide a lifeline to 46 communities (17,734 households), San Vicente-Taytay-Roxas Forests and Cleopatra's Needle KBAs form a biodiversity conservation corridor that primarily maintains connectivity among KBAs in northern Palawan under the NIPAS system.

J. B. Manuta, L. R. Simpol & M. Marasigan Foundation for the Philippine Environment

From India... Involvement of fisherman on the conservation of sharks and rays

Public awareness and involvement are the major keys for the success of all biological conservation initiatives. Knowledge and opinion of elusive species situation concentrate the orientation of public involvement in conservation initiatives. Shark and rays are the major capture fishery resources of Indian EEZ and are being continually exploited by different types of crafts and gears for decades. Kumar Chandrasekaran and Marudhu Pandi, Scientists from Centre for Ocean Research, Sathyabama Institute of Science and Technology Centre for Ocean Research, Chennai, Tamilnadu, India is continuously investigating the preliminary landing data, biological characteristics and diversity of elasmobranchs along the coast of Tamilnadu such as Chennai, Nagapattinam and Tuticorin. From our study we identified ray species 23.07% were near threatened, 34.61% were in data deficient and vulnerable, and 3.84% species were in endangered status. Moreover, 57.69% of rays belonged to the family Dasyatidae. The IUCN comparison results of sharks show that 40.9% of near threatened, 27.3% of vulnerable, 18.18% of least concern, and 4.54% of sharks were in data deficient, endangered and critically endangered status. According to schedule I of Wildlife Production Act (1972), 10 species of elasmobranch such as Rhincodon typus, Anoxypristis cuspidata, Carcharhinus hemiodon, Glyphis gangeticus, Glyphis glyphis, Himantura fluviatilis, Pristis microdon, Pristis zijsron, Rhynchobatus djiddensis and Urogymnus asperrimus were protected by the Government of India. Incidental and by catch practice are playing the role in declining these threatened animals. Further, species identification flyer was primed in local language (Tamil) and circulated among fishermen, boat owners and stakeholders to teach and create awareness on the red listed species and their importance in the ecosystem. We initiated this awareness campaign from 2015 with the support of Rufford foundation and continuing the same till date for the conservation of sharks and rays.

Reference URL:

https://www.rufford.org/projects/thangapandi_marudhupandi https://www.rufford.org/projects/chandrasekaran_kumar https://wp.me/p9GwBS-gP

Inbakandan, Dhinakarasamy

Mentor for Kumar Chandrasekaran and Marudhu Pandi for their Rufford fellow programme. Centre for Ocean Research, Sathyabama Institute of Science and Technology (Sathyabama University) Chennai - 600 119, Tamil Nadu, India.

Email: inbakandan@gmail.com/inbakandan@sathyabamauniversity.ac.in; Mobile: 91-9965540310 Websites: http://www.centreforoceanresearch.in

Information flyer on Tamil; circulated to fishermen to know sharks and rays

