

ORCHID CONSERVATION NEWS

The Newsletter of the Orchid Specialist Group of the IUCN Species Survival Commission

Issue 1

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BIODIVERSITY CONSERVATION TAKES MANY FORMS



Brokenhead Wetland Ecological Reserve, Manitoba, Canada where 28 of the 36 orchid species known from Manitoba may be found. http://www.gov.mb.ca/sd/parks/ec_reserves/pdf/Brokenhead_Wetland_Backgrounder.pdf Photo: M.H.S. Light

News – OSG Trade Sub-Group

Amy Hinsley (aehinsley@gmail.com)

The new OSG Global Trade sub-group is co-chaired by Amy Hinsley and Jacob Phelps. You are invited to visit their website to learn about activities and news. <http://globalorchidtrade.wixsite.com/home>

OSG at CITES

As part of the OSG Global Trade sub-group, Amy and Jacob attended the 17th CITES Conference of Parties in Johannesburg to discuss orchid trade, and how to better raise the issue of orchids within CITES. They spoke during the discussion on the only orchid-related item on the agenda, which was a proposal to create a working group to discuss exempting 'finished products' containing orchids, which include cosmetics, medicinal products and food.

New orchid trade paper

A new journal article, (Hinsley *et al.*, 2016), looking at the extent and reasons for CITES noncompliance amongst orchid growers and traders. In summary: around 10% of people spoken to had smuggled orchids, 5% had laundered orchids, and 11% had been sent orchids from an online purchase without any CITES paperwork. People surveyed generally had a negative view of CITES. See: **Food for Thought** for citation.

<http://onlinelibrary.wiley.com/doi/10.1111/conl.12316/full>

News – From OSG Chair, Mike Fay

A Facebook group for OSG has been established – if you haven't already visited/joined this, it can be found at <https://www.facebook.com/groups/835566089908869/>

I hope you like this – it is an open group for members of OSG and others who are interested in orchid conservation, so please recommend it to your colleagues and friends. The focus is on conservation activity/issues, so you won't find lots of photos of hybrid orchids there – but there is a lot of interesting information about conservation. Posts are vetted by the administrators

(with a light touch) - please feel free to add items that you think will be of interest to the group.

Two new groups have been established within OSG:

The one focusing on orchid trade issues (OSG Trade Sub-Group) is already functioning well as you will have read in the previous article.

Another Sub-Group focusing on molecular identification tools (chaired by Hugo de Boer) is being established – we hope that this will start activities early in 2017. Watch this space!

In other news, we have been striving to increase the representation of orchids on the IUCN Global Red List – one major achievement in 2016 was the completion of the red listing of all species of slipper orchids (Cypripedioideae) – a project led by Hassan Rankou (the Red List Authority for OSG) with contributions from many colleagues around the world.

For general information about OSG, newsletters (edited by Marilyn Light – let us know if you would like to contribute something for upcoming issues) etc. – see the OSG website:

<https://www.iucn.org/ssc-groups/plants-fungi/orchid-specialist-group>

I look forward to an exciting and productive new Quadrennium for OSG.

With best wishes for 2017,

Mike.

New lady's tresses orchids in The Netherlands and Belgium

Barbara Gravendeel

Naturalis Biodiversity Center, Leiden, The Netherlands
(Barbara.gravendeel@naturalis.nl)

Barbara Gravendeel has written of an investigation into the provenance of new *Spiranthes* populations found to be rapidly increasing in five different localities in The

Netherlands and in Belgium. Using a combination of DNA barcoding and morphological techniques, the populations were discovered to be manmade hybrids of non-native *Spiranthes cernua* ‘Chadd’s Ford’ and *S. odorata*. These new *Spiranthes* attracted visitors eager to see them blooming but at one locality, visitor traffic threatened biodiversity in the form of a rare syrphid fly, *Microdon myrmicae*, a social parasite of ground-nesting ants. Removal of these hybrid orchids from nature reserves is recommended to prevent dispersal.

In the article, Fig. 1 shows: Distribution of lady's tresses orchids (*Spiranthes*) in the Netherlands and Belgium until 1950 (triangle), 1950-2011 (diamond) and after 2011 (circle). *S. aestivalis* (grey), *S. lucida* (yellow), *S. romanzoffiana* (green), *S. spiralis* (black) and hybrids *C. cernua* Chadd's Ford x *S. odorata* (red) and *S. odorata* x *S. cernua* Chadd's Ford (pink). The article contains a Key with photos and floral drawings.

Here is the link to the publication:

<http://www.delevendenatuur.nl/tijdschrift.php?editie=11218>



The author and journalist photographing *Spiranthes* (*odorata* x *cernua* ‘Chadd's Ford’).

Photo by Guus van Oostwaard.

On the Bookshelf

Phylogeny: Discrete and Random Processes in Evolution, Mike Steel, 2016. SIAM (Regional Conference Series in Applied Mathematics; 89). <http://bookstore.siam.org/cb89/>

This book deals with the mathematical basis of selected aspects of phylogenetics. “This book provides an updated summary of the main theory, supplemented by a selection of topics...” For example, in Chapter 6:4, the author addresses phylogenetic diversity in the context of biodiversity conservation. This could be of interest to conservation planners working with phylogenetic mathematicians.

<http://bookstore.siam.org/cb89/>

Summary for Policymakers of the Assessment Report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) on Pollinators, Pollination and Food Production (2016). ISBN: 978-92-807-3568-0

http://www.ipbes.net/sites/default/files/downloads/pdf/spm_deliverable_3a_pollination_20161124.pdf

Food for Thought

Baylis, K., Honey-Rosés, J., Borner, J., Corbera, E., Ezzine-de-Blas, D., Ferraro, P.J., Lapeyre, R., Persson, U.M., Pfaff, A., and S. Wunder (2016). Mainstreaming impact evaluation in nature conservation. *Conservation Letters* 9: 58–64.

Gravendeel, B. (2016). Nieuwe schroeforchissen in Nederland en België. *De Levende Natuur* 117 (5): 203–206.

Hinsley, A., Nuno, A., Ridout, M., John, F. A.V. S. and Roberts, D. L. (2016). Estimating the extent of CITES noncompliance among traders and end-consumers; lessons from the global orchid trade. *Conservation Letters*. doi:10.1111/conl.12316

Phelps, J., Biggs, D. and E.I. Webb (2016). Tools and terms for understanding illegal wildlife trade. *Frontiers in Ecology and the Environment* 14: 479–489.

Poff, K.E., Sharma, J., and M. Richards (2016). Cold-moist stratification improves germination in a temperate terrestrial orchid. *Castanea* 81: 292–301.

Salazar, G.A., Hernández-López, T.J., Sharma, J., Jiménez-Machorro, R., Cabrera, L.I., and J. Treviño-Carréon (2016). *Greenwoodiella*, a new genus of Spiranthinae (Orchidaceae) from North and Central America and the Greater Antilles, with a new species from the Chihuahuan Desert. *Systematic Botany* 41(4). DOI 10.1600/036364416X693937.

Stadler, T., and J. Smrckova (2016). Estimating shifts in diversification rates based on higher-level phylogenies. *Biology Letters* 12: 20160273
<http://dx.doi.org/10.1098/rsbl.2016.0273>

Tang, C.Q., Orme, C.D.L., Bunnefeld, L., Jones, F.A., Powell, S., Chase, M.W., Barraclough, T.G., and V. Savolainen (2017). Global monocot diversification: geography explains variation in species richness better than environment or biology. *Botanical Journal of the Linnean Society* 183: 1–15

Call for conservation news

Members are asked to provide news of their recent conservation activities for publication in the OSG Conservation News.

Please submit material in Microsoft Word, and illustrations, if any, as separate jpeg files (not embedded), including a caption and photographic credit.

Editor: Marilyn Light (mslight@distributed.net)

Changes to contact information?

To maintain effective communication, we need to know of any changes in contact information.

Please inform the OSG Chair, Mike Fay.

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