



IALE BULLETIN

INTERNATIONAL ASSOCIATION FOR LANDSCAPE ECOLOGY

Dear IALE members!

Bulletin 36(1) delayed

Bulletin 36(1) was originally scheduled to be published in spring 2018. We thank all contributors who had send in their contributions in good time. Due to several reasons, we could not finalise it at this date and apologise for this delay.

Benjamin Burkhard

(IALE International Communication Officer)



Nature and society facing the Anthropocene
challenges and perspectives
for landscape ecology

IALE World Congress 2019 - Call for Symposia!

Submission is open for proposals to present symposia at the 10th IALE world congress that will be held in Milan (Italy) on 2019, July 1-5. The new deadline for submitting symposium proposals is 2018, September 15.

The conference theme is 'Nature and society facing the Anthropocene: challenges and perspectives for landscape ecology'. This can be interpreted very broadly, to address, among other topics: future landscape scenarios, ecosystem services evaluation and quantifications, metrics for landscapes, monitoring habitat and landscapes, new landscapes (seascapes, subterranean landscapes; artificial habitats ...), energy and food landscapes, biodiversity conservation in human dominated landscapes; history

of landscapes, road ecology; soundscape ecology; social impact of landscape policies; impact on landscapes of society pressures; panarchy and resilience at landscape scales; new technologies for landscape monitoring; nature based solutions and green infrastructure.

Anthropocene is a new world, but the concept is familiar to landscape ecologists. The "total human ecosystem" proposed by Zev Naveh, acknowledges the role of Homo sapiens in moving the equilibria of the Earth system. This perspective, with

a dramatic change of pace and magnitude of ecological processes and human action is a challenge for landscape ecology. New landscapes, novel human behaviors, and unexpected challenges may contribute to rethinking ecological laws and suggestions for beneficial practices for stakeholders and decision-makers.

To present your symposia follow the instructions in the website of the congress: www.iale2019.unimib.it/call-for-symposia/

Competitive call for IALE support

IALE invites you to contribute to IALE International through the following activities:

1. Call for Upcoming Chapter Activities

We consider the national and regional chapter meetings to be key for engaging the IALE community and supporting landscape ecology as an integrative discipline. Therefore, we ask for competitive applications for the financial support of chapter activities, particularly preparatory meetings for the IALE World Congress (WC) in 2019 or workshops/events to set up a new chapter with a maximum support of 1,000 €. Combinations of both are possible and subject to incoming requests and available funds. Applications for supporting chapter conferences should

be send by June, 01, 2018 to Christine Fürst, christine.fuerst(at)geo.uni-halle.de, including a one page description of the event and a financial plan that justifies the requested money.

2. Call for Supporting New Working Groups (WGs)

Working Groups are a highly successful instrument to enhance the cooperation and capacity building among regional chapters. WGs address a particular thematic / disciplinary interest, a specific communities (e.g. young scholars or female researchers), or cross-cutting topics that enhance interdisciplinary collaboration or cooperation with other groups or societies. New WG suggestions should include the addressed topic, a short description including planned activities

and the contact of the new WG leader. Applications for financial support should provide a 1 page summary of the intended activities for which the support is required and provide a financial plan. Activities will be supported up to an amount of 500 €. Applications should be send to Robert Scheller (rschell(at)ncsu.edu).

We are all greatly looking forward to your participation in our new WGs, your ideas, suggestions and particularly to sharing your landscape impressions with us!

Christine Fürst, Felix Kienast, Thomas C. Edwards, Benjamin Burkhard, Irene Petrosillo, Henry Bulley, Liding Chen, Andreas A. Christensen, Cristian Echeverria, Sima Fakheran, Robert Scheller

IALE FINANCIAL REPORT FOR 2017

The administrative management of the IALE finances for 2017 has been developed and monitored systematically. The initial budget given by € 58.599,80, and the final budget of € 60.097,56 highlight a positive balance of € 1.498,00. In particular, the incomes are related to the membership fees included the subscriptions to Landscape Ecology (€ 18.100,00). The total IALE expenses resulted in € 16.385,00, where about € 6.000,00 have been dedicated to the support of new IALE Chapters and

working groups. The present balance has been closed with a reservation of € 40.000,00 for the upcoming World Congress that will be held in Italy in 2019. Given this, we have only € 5.000,00 available for reservations to support new chapters and working groups in 2018, please see the next calls.

The IALE Executive Committee has approved the refund of 20% of the 2017 membership fees paid by IALE Chapters through the end of June 2017 (IALE-

Romania, IALE-Spain, IALE-Czech Republic, IALE-US). We thank the IALE Chapters that are in compliance with the payment of membership fees and in line with the deadlines as this guarantees the funds to support the activities of new IALE Chapters and working groups. The IALE Executive Committee continues to use Skype calls to manage the society in order to save costs.

by Irene Petrosillo (IALE International Treasurer)

		IN	OUT	
Income from 1 January 2017 to 31.12.17				
	Region fee	€ 14.610,00	€ 4.322,00	
Subtotal Region fee		€ 14.610,00	€ 4.322,00	€ 10.288,00
	Individual fee	€ 180,00	€ 9,60	
Subtotal Individual fee		€ 180,00	€ 9,60	€ 170,40
Income from regional and individual fees		€ 14.790,00	€ 4.331,60	€ 10.458,40
	LE subscription	€ 3.310,00		
	Payment Subscription to Springer		€ 2.343,06	
Subtotal LE subscription		€ 3.310,00	€ 2.560,00	€ 750,00
Administration costs			€ 2.185,95	
Bank costs			€ 506,87	
Web-site and Bulletin			€ 983,41	
Financial Supports (loan and donations) to IALE Regions			€ 6.034,41	
Total transactions 31.12.2017		€ 18.100,00	€ 16.602,24	€ 1.497,76
Balance without reservations				€ 60.097,56
Reservations	World congress 2019 (reservation 2016)		€ 10.000,00	
	World congress 2019 (reservation 2017)		€ 30.000,00	
	Bulletin 2017 cost		€ 480,00	
	IALE Europe directory 2017 costs		€ 2.500,00	
	Administrative support		€ 500,00	
			€ 1.000,00	
Subtotal reservation			€ 44.480,00	
Balance with reservations (31.12.17)				€ 15.617,56

Deadlines for 2018

Deadlines	For
2018, January 31	the list of Landscape Ecology subscriptions for 2018, by specifying if online or printed version, has to be sent to the treasurer: irene.petrosillo@unisalento.it
2018, June 30	early membership registration* and Landscape Ecology subscription payments (the list of paying members, by specifying full or student members, and LE subscribers has to be sent to the treasurer: irene.petrosillo@unisalento.it)
2018, December 20	late registration* (the list of paying members has to be sent to the treasurer: irene.petrosillo@unisalento.it)

* In case the EC will approve the 20% refund for early registration, June 30 is the reference deadline;

The payments can be performed through a bank transfer - the bank account is ABN-AMRO Bank, or through PayPal (for details send an e-mail to the treasurer: irene.petrosillo@unisalento.it)

The costs are exactly the same as 2017:

For Chapters in regular income Countries:

- Full membership (€ 20)
- Student membership (€ 10)
- Full membership incl. Landscape ecology (US\$ 100 or € 95)
- Student membership incl. Landscape ecology (US\$ 70 or € 65)

For Chapters in low-middle income Countries:

- Full low income membership (€ 10)
- Student membership (€ 5)
- Full membership incl. Landscape ecology (US\$ 95 or € 85)
- Student membership incl. Landscape ecology (US\$ 65 or € 60)

Prof Dr I.S. Zonneveld, 1924-2017

On December 18, 2017, Prof. Dr. I.S. Zonneveld passed away. He was 93 years old. With him we lose one of the pioneers of landscape ecology, with a thorough holistic vision and with a lot of attention for the application of knowledge in practice. Moreover, he was an open person with a big heart for his students and colleagues.

His origin is within the Dutch freshwater tidal area of the Biesbosch. For many he was "Ies van de Bies," the man from the Biesbosch where he was in hiding during the Second World War to escape the "Arbeitseinsatz", the forced work assignment in Germany. Here he met his wife, who was a botanist and vegetation scientist. He remained involved in this area until the end of his life. Zonneveld studied soil science and vegetation science at Wageningen University and he obtained his doctorate in 1960 on a study into the soil and vegetation and their relations in the Biesbosch.

The basis of his landscape ecological research lies in the overview surveys he made in Asia and Africa. In 1966 he started a new department, applied landscape ecology, at the ITC (International Training Center for Aerial Survey, now part of the University of Twente). Here Zonneveld integrated soil, vegetation and geomorphology, focused on the application in land evaluation. From 1968 until his retirement he stayed connected with the ITC. From 1972 to 1988 he also taught at Wageningen University and regularly at the University of Utrecht. He has worked throughout the world in international projects in countries such as Colombia, Ivory Coast, Kenya, Mali, Mauritania,



Mexico, Thailand, Tunisia, Sudan and Sri Lanka.

Zonneveld brought the Landscape ecology of Troll to the Netherlands. His starting point was that landscape ecology is not a new science in itself, but an integration of knowledge from science fields such as soil and vegetation science, geomorphology, but also from social sciences. He regarded it as transdisciplinary. He was involved in the emergence of the Dutch Working Community on Landscape Ecological Research (WLO). He was a member of the Working Group on theory and he played an important role at the so-called Veldhoven congress in 1981, where it was decided to establish the International Association

for Landscape Ecology (IALE). After the founding of IALE in 1982, Zonneveld was asked to be the first chairman at a time when communication between East and West was extremely difficult.

His books, including *Land Ecology* (1995) and *Vegetation Mapping* (1988, together with Küchler) are leading in the field. This latest publication, in which he classifies land and vegetation on the basis of the life forms of Raunkiaer, turned out to be the most universal system in recent years, to link large-scale earth observation to in situ process information. It has therefore been the basis for the ecological classification of remote sensing observations of Land Cover information (FAO-LCCS) and in-situ observations of habitat information (General Habitat Categories).

His students can be found all over the world, especially because of his role in education at the ITC and in Wageningen, that both attracted many international

students. A selection of the work in which he and his students were involved can be found in the ITC publication 81 from 2001 entitled „Landscape Ecology applied in Land Evaluation, Development and Conservation, Some Worldwide Selected Examples“.

He continued to share his knowledge until the end of his life. He looked forward to the scientific-philosophical article of Chunglin Kwa about his scientific method (The visual grasp of the fragmented landscape) that will be published in *Historical Studies in the Natural Sciences* Vol. 48, 2018 (1).

by Rob Jongman

Update from the IALE “Spatial Analysis of Organisms in the Environment” Working Group



Photos from the conference room



The most important activity of our WG in year 2017 was participating in the European Landscape Ecology Congress held in 12-15 September, 2017 in Ghent, Belgium. Following one of the primary aims of our WG, we proposed a symposium related to the topic of our WG which the title was: „Exploration of underlying ecological processes by analysis of observed spatial patterns in vegetation ecosystems“. The main aim of the suggested symposium was to bring spatial ecologists, researchers, students and other scientists (e.g., statisticians) together to discuss ideas and initiate collaborations that may result in advances in ecological studies not only at patch scale but also at landscape scale.

Regarding the large number of symposia submitted to the conference, our proposed symposium was joined with another related one and the final title was „Beyond the Mosaic: A better characterization of landscapes would help to understand ecological patterns and processes“. We received more than 40 abstracts, however, 16 of them were accepted for oral presentation and six of them were selected to be presented as poster. Together with Jacques Baudry (INRA, France) and Felix Herzog (Agroscope, Switzerland), we had one of the most interesting symposia within the conference as the participants told us.

I, as one of the lecturers, talked about one of the most recent studies performed in Bialowieza Primeval Forest with the cooperation of Dr. Krzysztof Sterenczak entitled „Mixture of Norway spruce and other species modify its negative intraspecific interactions in Bialowieza Primeval Forest, Poland“. The topic of this study was completely related to the WG and it was about studying the

species coexistence in an old growth forest, explored by spatial pattern analysis. The abstract of the lecture is provided in the following paragraph.

The present spatial structures of old-growth forest stands at fine- and landscape scales mainly result from competitive or facilitative interactions among conspecifics and heterospecifics during succession. Profound influence of these important ecological processes may be characterized by analyzing spatial distribution of individuals at fine scales. Bialowieza Primeval Forest (BPF) is one of the best-preserved forests in the lowland part of Europe which represents an important remnant of temperate broad-leaved forests that once covered most of this continent. Therefore, spatial pattern analysis of focal species in BPF as one of the UNESCO World Heritage Sites may provide significant insights into mechanisms and processes that maintain species associations in BPF. Main goals of this study were to assess fine-scale spatial patterns of Norway spruce mixed stands and explore how inter- and intraspecific interactions of spruce and other species shape their spatial structure. To accomplish these goals, we investigated the spatial patterns of spruce and its accompanying species within 117 plots that had been established in mixed stands of spruce in BPF. The spatial patterns of trees, considering species and biophysical characteristics were analyzed by univariate and bivariate pair correlation function $g(r)$, density correlation function $CmK(r)$, and mark correlation function $kmm(r)$. In mixed spruce stands, the upper layer was dominated by Scots pine, alder, and hornbeam with a share of more than 31.5% of all species, while spruce was the most abundant species (over 55.1%). The

unimodal shapes of diameter distributions of spruce and other species (117 plots, total area 5.85 ha) with skewness to the right underline the uneven-aged structure of the studied forest. Although the spatial distribution of other species was more clumped than spruce at small spatial scales, the spruce-other species interactions indicated lower interspecific facilitation. Moreover, the results showed that diameter at breast height DBH, of spruce individuals that had conspecifics at neighborhood was significantly less than DBH of spruce that had individuals of heterospecific species. In addition, we found that density of neighboring individuals of heterospecifics had negative effects on the DBH of spruce. We conclude that primeval mixed stands of spruce show aggregated spatial distribution at small spatial scales because of high shade tolerance of spruce. We also found that the aggregation of individuals of spruce around their conspecifics negatively influences the DBH, while this negative effect becomes less when other species are located within neighborhood of spruce.

Furthermore, Dr. Felix Herzog (Agroscope, Switzerland, felix.herzog@agroscope.admin.ch) became interested in the topic of our WG and he accepted our invitation to join us as a member for 2018. We hope our WG would be more active in 2018 to better follow its aims.

By Yousef Erfanfard (WG leader)

Update from the IALE “Edu-WG: Landscape Ecology in Schools”

The WG conducted the following key activities in the period 2016 - 2017

1) Co-organization of the „ symposia at the IALE European Congress in Ghent, 12-15 September 2017

Link: www.iale-europe.eu/iale2017/landscape-education-and-awareness-raising-in-the-21st-century

2) Oral presentation „Non-formal activities to promote Landscape Ecology in schools“ by WG members Ioana Stoicescu, Simona R. Grădinaru, Iulia Călin, Ana-Maria Calotă, Ileana Pătru-Stupariu at the IALE European Landscape Ecology Congress in Ghent, 12-15 September 2017

The presentation focused on the use of non-formal activities to promote landscape ecology knowledge and principles, within the projects organized by Edu-WG:

Landscape Ecology in Schools.

Link: www.iale-europe.eu/iale2017/non-formal-educational-activities%C2%AO-promote-landscape-ecology-schools

3) Educational project „One Landscape, Two Stories: People and Birds“ (2016 - 2017)

The project aimed to involve pupils from four different communities (the commune of Slătioara- Olt County, the city of Bucharest and the communes of Glina and Brănești - Ilfov County) in activities that raise awareness on the importance of the fauna and flora in the proximity of Slătioara Pit, Olt County, Romania. In order to form a complete image regarding the landscape as a habitat, the project presents two perspectives, namely two

parallel situations of equal importance to the community, occurring in the same landscape: people and birds. The people component envisaged Heidelberg Cement Company (namely Slătioara Pit) as one of the stakeholders present in the landscape. The students had the opportunity to visit and interact with the pit manager who described each step of the technological process. The birds component was represented by a Natura 2000 site located in the proximity of the pit. The entire area of Lower Olt Valley is part of a Natura 2000 protected area (ROSPA-0106), which covers bird habitats of national and international importance. During the field trip the pupils were informed about the life (habitat, behaviour etc.) of bird species that nest on the site.

The students were guided into observing how the two components, people and birds, are closely connected through the concept of landscape, which both of these groups use according to their needs. Hence, the students learned that the Olt River is a highly important resource that brings benefits to both communities (nature and humans), if managed in a responsible manner, with the help of education.

Participant schools: three public schools (Slătioara Secondary School, School no.1 Brănești,

School no.1 Glina) and one private school (Alethea School).

Number of involved pupils: 60

Number of involved teachers: 5

Number of involved economic agents: 1 (Heidelberg Cement Romania)

Sponsorship: Litera Publishing House has offered books from the National Geographic collections, which were offered to Slătioara School.

Link: www.quarrylifeaward.ro/node/30056

4) Development of material for Landscape Ecology didactics (2016-2017)

The implementation of the „One Landscape, Two Stories: People and Birds“ involved the development of a series of materials for Teaching. We considered them to be a good starting point for other similar activities in schools, by providing a collection of good practices and educational materials. These were presented as a video collection as well as a downloadable Teachers' Guide, posted



Photos taken during field visits

presented as a video collection as well as a downloadable Teachers' Guide, posted on educational websites. We hope that such materials provided an opportunity for other teachers to cultivate their students' interest for the close environment and biodiversity, as well as to help them ideas on how a pit actually operates.

A collection of videos involving the pit staff and students from the local community please view here:

Link: www.youtube.com/channel/UC2XdU-c8cJ94uX3i85hcDnw

This collection was intended not only to stimulate the viewer's curiosity towards the activity carried out by Heidelberg Cement, but also to become a source of inspiration for teachers who will consider applying similar activities together with

their students. These videos include the following topics:

- An introduction video inviting the public to join our journey. This video presents one of our team members visiting Slătioara pit and introduces the viewers to the landscape.
- This video is extremely spontaneous and presents students from Slătioara School addressing the pit Manager the first questions that came to mind.
- This is a short documentary video, designed to fit the understanding level of secondary-school students. It presents all the steps of the technological process, starting from the extraction until the delivery stage.

Hand-crafted flash cards for bird species identification (in Romanian)

Link: www.infinit-edu.ro/uploads/media/pasari-ro_yfde.pdf

A Teachers' Guide (in Romanian and English on request)

This PDF document targets the community of teachers and includes all the educational resources that we used or resulted from our project, such as:

- links to our video collection;
- printable materials for bird species identification and tutorial for teachers;
- nature and portrait photography advice, as well as a gallery of our examples;
- a list of outdoor and bus activities for students;
- a list of recommendations for planning a field trip, according to our experience from the 15th of June.

Link: www.infinit-edu.ro/uploads/media/qla2016-ghid-ro_nOkq.pdf



 <p>Dumbrăveancă <i>Coracias garrulus</i></p>	 <p>Fereastră mic <i>Mergus albellus</i></p>
<p>Habitat preferat</p> <p>Dumbrăveanca este o specie migratoare mică, întâlnită atât în etajele colinare, cât și la câmpie. Preferă zonele calde și uscate, în apropierea pădurilor de pădure sau a copacilor izolați. Cuibărește adesea în scorburile arborilor bătrâni.</p> <p>Dietă</p> <p>Dumbrăveanca se hrănește cu insecte, rozătoare mici și reptile, pe care le vânează pândind perioade lungi. Uneori, consumă și fructe.</p> <p>Curiozități</p> <ul style="list-style-type: none"> • își localizează prada pe sol și o izbește de crengile copacilor înainte de a o consuma. Este o specie teritorială și foarte gălăgioasă. • Migrația nu se realizează în stoluri, ci în păcurei răsfrate. • Este foarte sensibilă la schimbarea utilizării terenurilor. • Deasupra Mării Arabice, a fost înregistrată o coliziune dintre o dumbrăveancă și un avion! 	<p>Habitat preferat</p> <p>În România, fereștrășul poate fi întâlnit toamna și primăvara; țara noastră nu este destinația finală, ci doar intersectează de culoarul lor de migrație. Această specie preferă pentru cuibărit zonele umede, mărginite de păduri, cu arbori bătrâni și cu zone deschise de apă, fără multă vegetație acvatică.</p> <p>Dietă</p> <p>Fereștrășul se hrănește preponderant cu pești, crustacee, insecte de apă și larve. Se scufundă rapid pentru hrană, aproape vertical. Sub acțiunea stresului, regurgitează hrana.</p> <p>Curiozități</p> <ul style="list-style-type: none"> • În migrație zboară în grup, în formație de tip V sau în linie oblică. • De obicei masculul este tăcut, însă cântă serenade partenerei în perioada de împerechere. <p><small>Sursă info: SOR, Birdlife Internațional, Atlasul speciilor de păsări de interes comunitar din România</small></p>

Examples of teaching material

News from IALE China

The 9th National Conference on Landscape Ecology was held during November 10-12, 2017 in Guangzhou, China.



New Executive Committee of IALE-China

The conference was co-organized by the IALE-China Chapter, Ecological Society of China, Geographical Society of China, Guangzhou University, Institute of Applied Ecology and Research Center for Eco-Environmental Sciences of the Chinese Academy of Sciences (CAS), and Peking University.

The theme of the conference was „Science, Culture, and Wisdom: New Progress in Chinese Landscape Ecology“. Seven keynote speakers presented their cutting edge studies on different landscapes from Loess Plateau, Mountainous area to urban regions.

More than 200 presentations were made in parallel sessions such as „Urban dynamics and its ecological effects in metropolitan

area“, „Coastal zone landscape ecology and adaptive management“, „Landscape sustainability and land system design“, „Landscape service and biodiversity conservation“, „Multifunctional landscape and tradeoffs between ecosystem services“, „Landscape ecology and urban sustainability“, „Urban heat island effect and landscape optimization“, „Mountain landscape evolution“ and „Landscape ecology and landscape architecture“. More than 750 participants from 207 organizations attended this conference. This is the largest national conference on landscape ecology ever held in China (Fig. 2).

In order to encourage the younger generation for their efforts on landscape

ecology, IALE-China established the Du-Xue Award in 2015 for outstanding graduate students. Six postgraduate students obtained this Award in 2017. In addition, nine students were awarded the best oral presentations for this conference.

During the conference, IALE-China elected the new Executive Committee (Fig. 3) and standing members. Prof. Yuanman Hu from the Institute of Applied Ecology, CAS, was elected as the new Chairman, for a term of four years.

The 10th National Conference on Landscape Ecology will be held in Urumchi in 2019, co-hosted by the Xinjiang Institute of Ecology and Geography, CAS, and Xinjiang University.



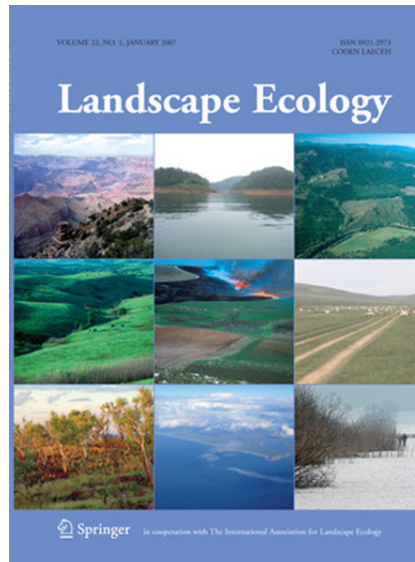
Conference hall during the keynote speech



Liding Chen, the Chairman of IALE-China, at the opening ceremony of 9th National Conference on Landscape Ecology, China

IALE House Journal "Landscape Ecology" with highly increased impact factor

The impact factor of our House Journal "Landscape Ecology" increased significantly and is now (2017) at 3.833, an increase of 6.0%! Congratulations to the Editor-in-Chief, all Associate Editors, to the Advisory Board, and to the Editorial Board Members for the hard work and dedication.



Higher Education Ecological Data (HEED) Survey

We are seeking information from instructors at institutions of higher-education who are currently leading, or are interested in leading, efforts to collect ecological data through class-based activities. This survey takes approximately 15 - 20 minutes to complete, and will contribute to a global review on the extent and types of ecological data collected by students, and provide insight into the opportunities and challenges associated with these class-based efforts to support desired educational and scientific outcomes. We ask that you complete this survey and/or forward this survey to colleagues or your association list-serve (if applicable). The survey can be found here: tinyurl.com/EcolDataSurvey. We ask that you complete the survey by **May 17, 2018**. All responses are anonymous.

Background

Many classes (courses, units, modules) in institutions of higher-education (universities, colleges) have field excursions where instructors guide students in the collection of ecological and environmental data. Although data collection during

class field excursions are undoubtedly occurring, there is little understanding of the geographic extent and characteristics of these efforts, and the institutional and logistic challenges and opportunities that instructors have when maintaining, or considering new, class field excursions.

In order to address this issue, we are seeking the opinion of instructors from institutions of higher-education. Please click here for the survey link and complete the survey. Also, we ask that you forward this e-mail to any colleagues or organizations to reach other instructors who are currently, or might be interested in, leading class-based efforts to collect ecological data. If you have any questions or concerns, please feel free to contact the Olden Research Lab (oldenlab@uw.edu). Thank you very much for your time!

Sincerely,

Higher Education Ecological Data (HEED) Survey Team (oldenlab@uw.edu)
Julian Olden and the Freshwater Ecology and Conservation Lab @ UW Seattle, Washington, 98105, United States
depts.washington.edu/oldenlab/

Landscape Geography in the 21st century Conference

11.09.2018 - 14.09.2018 Simferopol

Main Conference themes:

1. Theory and methodology of landscape studies and landscape ecology.
2. Spatial-temporal organization of landscapes, trends of its changes.
3. Present-day landscapes of regions.
4. Landscape-ecological state of regions.
5. Geochemistry and geophysics of landscape.
6. Mapping and modelling of landscapes.
7. Sustainable development of regions.
8. Modern methods of landscape and landscape-ecological research.
9. Problems and prospects of development of education in the field of physical geography and landscape studies.
10. Prospects of landscape policy and management of landscapes. International landscape centers.

Conference website:
landscape.cfuv.ru/eng/index.html



IUFRO Conference on “Adaptive Management for Forested Landscapes in transformation”

October 1-5, 2018, Posadas, Misiones, Argentina

This conference will highlight the accelerated changes imprinted on our planet within this era of the Anthropocene. Transformation of forest use that is occurring in response to the pressures of globalization, population growth, resource scarcity and ecological degradation are part of the BIG challenges ahead. Biodiversity is essential to human well-being, but people have been reducing biodiversity throughout human history. Loss of species and degradation of ecosystems are likely to further accelerate in the coming years. Nonetheless, global goals to reduce the rate of biodiversity loss have mostly not been

achieved. It is essential to take into account ecological, economic and functional values of the landscape to improve planning and decision-making. Operational solutions are needed to reconciling biodiversity conservation in the light of increasing demands of natural resources and land. Within the framework this Conference will focus on key topics to assess problems but also to find solutions for a better future in forested landscapes.

Conference Website:
iufro2018posadas.com/



Upcoming ESP Regional Conferences 2018/19

Since 2016, the Ecosystem Services Partnership ESP has organized regional conferences on a bi-annual basis. Several regional conferences have been scheduled for 2018 for the following regions: Middle East and North Africa (MENA, took place in April), Asia, Europe, Latina America, North America (ACES conference) and Africa.

Asian ESP Conference 2018
Communicating and Engaging Ecosystem Services in Policy and Practice in Asia
 Location: Wildlife Institute of India (WII), Dehradun, India
 Date: 9-13 October 2018
 Website: www.espconference.org/asia2018

European ESP conference 2018
Ecosystem services in a changing world: moving from theory to practice
 Location: Kursaal Congress Centre and Auditorium, San Sebastián, Spain
 Date: 14-19 October 2018
 Website: www.espconference.org/eu2018

Latin American ESP conference 2018
Global changes, ecosystem services and multilateral agreement in Latin America and the Caribbean
 Location: Convention Center – State University of Campinas, São Paulo, Brasil
 Date: 22-25 October 2018.
 Website: www.espconference.org/latinamerica2018

ACES 2018
Natural Resources Benefitting People
 Location: Crystal Gateway Marriott Hotel, Washington DC, USA, 2018
 Date: 3-7 December 2018
 Website: www.conference.ifas.ufl.edu/aces/

African ESP conference 2019
Management of Ecosystem Services for Nature Conservation and Human Prosperity in Africa
 Location: Cristal Hotel, Kpalimé, Togo
 Date: 4-8 February 2019
 Website: www.espconference.org/africa2019

ESP
 Ecosystem Services Partnership



The IALE Bulletin is distributed several times a year to the members of IALE. IALE - the International Association for Landscape Ecology was founded in 1982 to promote communication between scientists, planners and interdisciplinary scientific research.

IALE Executive Committee:

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Bulletin Deadline

Vol. 36 no. 2: September 30, 2018
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