



**INTERNATIONAL GEOGRAPHICAL UNION
(IGU / UGI)**

**COMMISSION ON LAND DEGRADATION AND DESERTIFICATION
(COMLAND)**



REPORT OF ACTIVITIES: 2017

Andrea Vacca (Chair) and Owen Graham (Secretary)

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www.comland.org

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The Commission on Land Degradation and Desertification (COMLAND) is a Commission of the International Geographical Union (IGU). See <http://igu-online.org/> for further information on the IGU.

0 PURPOSE AND SCOPE OF COMLAND

Most environments are affected by common factors that favour and increase land degradation processes. Two main topics are widely responsible: a) climatic conditions and changes, and b) anthropic impacts through land use. There is an urgent need to achieve a better practical and theoretical understanding of land degradation processes which affect the world's landscapes. In order to achieve these objectives, the working plan of the Commission is as follows:

- to promote and coordinate interdisciplinary research on land degradation and desertification in our changing global environment;
- to study the effects of environmental change, both natural and human induced, and their implications for land degradation and desertification;
- to conduct regional case studies under different climatic regimes and environmental risks (forest fires, floods, river channel changes, soil-erosion, water depletion, water quality), study the planning and design of conservation measures and the potential conflict between ecological sustainability and economic viability;
- to alert authorities as to the importance of adequate surveillance of land degradation processes;
- to develop and communicate the best techniques for monitoring changes and collecting data, and
- to sponsor and support activities leading to exchange of information regarding land degradation and desertification.

I STEERING COMMITTEE

Chair:

Associate Prof. Andrea Vacca, Italy
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Members:

Secretary:

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Dr. Matija Zorn
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Completed tenure on Steering Committee:

- Prof. Paul Hudson, Netherlands (completed 2016)
- Prof. Takashi Oguchi, Japan (completed 2016)

New Steering Committee Member:

- Dr. Matija Zorn, Slovenia (appointed 2016)

II COMLAND MEMBERSHIP

COMLAND MEMBERSHIP BY COUNTRY (as at December 2017)

(country unknown)	30
Australia	27
USA	23
Poland	19
China	17
United Kingdom	15
Israel	12
Germany	11
Iceland	11
Italy	9
Brazil	6
Netherlands	6
Spain	6
South Africa	6
Austria	5
France	5
Portugal	5
Hungary	4
India	4
Japan	4
Armenia	3
Belgium	3
Chile	3
China, Rep. (Taiwan)	3
Korea, Rep.	3
New Zealand	3
Slovenia	3
Canada	2
Finland	2
Thailand	2
Albania	1
Argentina	1
Bangladesh	1

China (Hong Kong)	1
Greece	1
Iran	1
Ireland	1
Mexico	1
Mongolia	1
Singapore	1
Sweden	1
UAE	1
TOTAL	264

The COMLAND Membership list is regularly updated with new members and deletions of others where emails are consistently rejected (bounced) for approximately 2 years.

People are welcome to join COMLAND by sending their name, affiliation, country and email via the “Contact” page on the www.comland.org website. Members will be sent emails on an irregular basis advising of meetings and other relevant matters including messages from the IGU.

III ACTIVITIES

COMLAND continues to be an active IGU Commission, and since the 2008 IGU Congress in Tunis has been productive from the standpoint of the organization of meetings, publications, awards, and in the addition of new Members and Steering Committee Members.

Proposed Iceland Meeting:

A planned workshop, meeting and field trip in Iceland had been scheduled in mid 2017. This activity was cancelled in early 2017 for institutional reasons. Subsequently, the COMLAND Secretary visited professional colleagues in Reykjavik with the view to scoping a revised activity in SW Iceland in 2019. This was privately funded. If this proposed activity receives local approval and support, it is likely that the model for a workshop, meeting and field trip that was successful in recent meetings in may be adopted.

ICOPFIRES Barcelona (February 2017):

The International Congress on Prescribed Fires (ICOPFIRES) in Barcelona (1-3 February 2017) was formally supported by COMLAND. The profile of the Congress was helped by COMLAND endorsement and publicity on our website homepage increased awareness. A report on this activity is in the Appendix.

International Conference on Geomorphology (ICG) – Delhi (November 2017):

COMLAND held an open Business Meeting at the ICG Conference. Steering Committee membership vacancies were discussed with the guiding principles of membership including but not limited to being of a geographic spread, gender equity, support of COMLAND activities and Objectives and ability to contribute to COMLAND activities.

COMLAND co-hosted an ICG Session with the Commission on Hazard and Risk (S39). There were 12 scheduled papers over the half day session. All scheduled papers were delivered. Moreover, there were 3 posters scheduled, of which 2 were delivered.

COMLAND Members attended both pre and post Conference field trips in a variety of locations. The various field trips covered different environments and allowed detailed consideration of a range of geomorphic features and associated issues for land degradation study.

COMLAND provided financial sponsorship to the ICG Organisers specifically to assist the Young Geomorphologists section of the program. COMLAND's contribution was acknowledged in the Opening Ceremony and delegates were advised that two Young Geomorphologists were able to attend and contribute as a result of this funding. The COMLAND logo was prominently displayed on Conference banners.

IGU Regional Conference – Quebec (August 2018):

COMLAND is proposing to co-host a Session with the Commission on Hazard and Risk at the IGU Regional Conference in Quebec, Canada in August 2018.

IGU Commission on Agriculture and Land Engineering (AGLE) – Conference 2018:

COMLAND has agreed to liaise with the IGU AGLE Commission with the view to holding a joint conference, meeting and field trip in Australia in late 2018. Developments will be communicated directly to COMLAND members and via the COMLAND website.

Other events:

There are proposals for COMLAND meetings and field trips in several locations in 2019 and 2020. These will be publicized when further developed and agreed to by the Steering Committee.

IV COLLABORATION WITH OTHER ORGANIZATIONS:

International Association of Geomorphologists & Indian Institute of Geomorphologists:

Active collaboration and support of ICG Conference (Delhi 2017) – Chairing of Session S39, participation in field trips and financial sponsorship of ICG for Young Geomorphologists program.

Environment Institute of Australia and New Zealand (EIANZ):

Following the successful Tasmanian Meeting and field trip (October 2014), COMLAND has maintained liaison with the EIANZ with the view to investigating the potential for future collaborative events.

Other IGU Commissions:

COMLAND has a working relationship with the Commission on Hazard and Risk and is developing such relationship with the Commission on Agriculture and Land Engineering.

- COMLAND and the Commission on Hazard and Risk held a successful joint Papers Session at the IAG Delhi Conference in November 2017.
- COMLAND and the Commission on Hazard and Risk are proposing a joint Papers Session at the IGU Quebec Conference in August 2018.
- COMLAND and the Commission on Agriculture and Land Engineering have agreed on holding a joint conference and field trip in late 2018.

V PUBLICATIONS

COMLAND continues to publish papers from its sponsored sessions and conferences, with most appearing in international peer reviewed journals.

A selection of papers from the COMLAND Meeting in Slovenia (June 2016) are being edited and compiled for a special edition of the Journal of Land Degradation and Development. The edition title will be: "The Role of Historic Impacts on Modern Environmental Processes and Management". Publication is expected in early 2018. The guest editors are Drs Paul Hudson and Matija Zorn.

VI AWARDS:

Several important contributors to land degradation research have been awarded by COMLAND. The COMLAND Award is intended to express appreciation to individuals or groups for their special contributions to COMLAND and land degradation science. COMLAND's Premier Award is for Distinguished Research on Land Degradation and is open to both individuals and institutions.

Awards may be granted by the Steering Committee or considered upon submission receipt. Submissions are generally only considered if applicants can demonstrate a track record of supporting COMLAND and its Objectives.

COMLAND Award

- Owen Graham, Australia, 2015
- Matija Zorn, Slovenia, 2016

VII WEB SITE

COMLAND has recently completely updated and revised its own website, which contains information on its structure, activities, past and future meetings. The website was revamped in 2013 and is now maintained on a commercial platform by Owen Graham (Secretary of COMLAND). The address is: www.comland.org

The COMLAND website contains information that includes upcoming and past meetings, the Steering Committee, awards, reports and publications.

APPENDIX: Report from iCOPFires – an event supported by COMLAND

International Congress on Prescribed Fires (iCOPFires)



From the 1st to the 3rd of February of 2017, Barcelona hosted the **International Congress on Prescribed Fires (iCOPFires)**. The **International Congress on Prescribed Fires (iCOPFires)** was co-organised by the Catalan Fire and Rescue Service, the University of Barcelona and Pau Costa Foundation. And it had the support of important scientific and academic associations as: COMLAND, CREAM, CTFC, UdL and UMH.



Photo WFSS/Photo ICOPFires during the opening sessions. Paranimf of University of Barcelona, respectively).

Around 300 scientists and practitioners with a variety of specializations and affiliations contributed to an interdisciplinary and heterogeneous congress, to discuss about current scientific and fire management challenges:

- ✓ The best practices on using prescribed fires as a management tool.
- ✓ The spatial and temporal scales of the prescribed fire effects, immediately after fire, short-term effects, medium and long-term effects. At different spatial scales from molecular changes, plot studies to catchments and landscape studies.
- ✓ The influence of forest fires and their intensity and recurrence in Carbon cycling and climate change analysis.
- ✓ The use of models to predict changes and recovery after fire.
- ✓ Successful initiatives of practitioner associations and national strategies to conduct prescribed fires.
- ✓ Societal perception, history and the roles of administrations.

Two field trips took place during the meeting:

A pre-conference fieldtrip co-organized by the Forest Sciences Centre of Catalonia and the GRAF team (Forest Fire Area of the Catalan Fire and Rescue Service). The participants visited the 1998 Solsones Wildfire, that consumed 27.000 Ha with an extreme behaviour. The current understory fuel management treatments being applied in the area were evaluated and discussed.

The conference fieldtrip to Olesa de Montserrat region where the GRAF team executed a prescribed burn, on a Life Project¹ plot. These practices are common in Catalonia as part of the firefighting training programs and also as a tool for forest management. The attendees participated in a series of onsite workshops to discuss the prescribed burn objectives and organization, the fire regimes and fire ecology of the Olesa de Montserrat region, the post-prescribed fire effects and the human dimension and societal acceptance.

A special issue on the *Science of the Total Environment* journal is being prepared with contributions from the conference participants. Guest editors are X. Úbeda (University of Barcelona), P. Pereira (Mykolas Romeris University) and D. Badia (University of Zaragoza).

If you are in a fire prone region with good international access, you could contribute to expand the fire community and help it move around the world by hosting future iCOPFires editions.