IRG51 Special session:
Protection against wood borers in the marine environment

Timber structures in the marine environment require protection against macro biological degradation. Wood borers attack timber in service and can cause severe damage in a short period of time. The use of timber in marine applications is threatened by the use of concrete and steel if no viable alternatives to restricted wood preservation systems and to tropical hardwood species, which underlie restricted timber trade, can be found.

Research activities on the protection of timber structures for the marine environment have been scarce and do not yet adequately meet the need for novel approaches to the problem of biodeterioration of wood in the marine environment. Recent research on novel wood protection systems against wood borers is shaped by the idea of preventing settlement on the wood surface or interfering with digestive processes. There is a need to understand more about how and why marine wood-borers attack timber and focus more on the different species of degrading organisms and the mode of action. Permanent and temporary test sites would help to monitor species abundance and distribution and thus changes in borer hazards. Lesser known tropical wood species are difficult to market due to the lack of reliable test data on their performance. More research on the properties of tropical wood species from sustainable forestry would contribute positively to the use of wood in marine structures. Coastline protection is an increasing problem and will lead to higher costs in the future. Timber used for coastline protection needs to be fit for purpose in a harsh environment. Changes in salinity and temperature of seawater can lead to the spreading of wood-degrading organisms.

The International Research Group on Wood Protection (http://www.irg-wp.com) is holding a special session on the protection against wood borers in the marine environment during the upcoming Annual Meeting in Bled, Slovenia in 2020. Scientists from all disciplines and industry representatives from all sectors are encouraged to contribute to this special event!

Topics of interest within this session may include:

- Novel treatments of wood
- Timber constructions in the marine environment
- Damage assessment techniques and maintenance
- Changes in the abundance and distribution of wood borers due to changing climate conditions
- Settlement and early attack of wood borers on wood – mode of action
- Influence of other fouling organisms
- Bacterial symbionts of wood borers
- Field tests versus lab trials
- Lesser known durable wood species
- Coastline protection using treated wood
- Aquatic impacts of preservatives
- Environmental impact models
- Other items or perspectives

For more information please contact session chair Andreas Treu (andreas.treu@nibio.no)