

**GFMC Tool 9 – Capacity building in the application of principles of integrated fire management in biodiversity management, nature conservation and protected areas management**

**Brief description of the tool:** Historically many natural and cultural landscapes have been influenced and shaped by natural fire and burning practices by aboriginal populations. The use of fire has helped shape ecosystems and landscape patterns of high ecological and cultural diversity, e.g. heathlands, open grasslands, meadows, and swidden (shifting) agriculture sites. Certain natural and cultural fire regimes contribute to ecosystem stability, high biodiversity and carbon storage. Many countries are lacking the knowledge to integrate natural and prescribed management of fires to maintain these assets. The targeted use of prescribed fire in some ecosystems will also remove combustible material under “controlled” conditions and result in reduced likelihood and intensity of severe wildfires, including the secondary consequences of wildfires (erosion, surface runoff, flash floods, land- and mudslides, rock fall etc.) and ecosystem degradation including depletion of terrestrial carbon pools. Targeted capacity building is offered by GFMC and the Regional Wildland Fire Networks and the Regional Fire Management Resource Centers, respectively, to promote the understanding and apply methods of Integrated Fire Management (IFM), including the use of prescribed fire. **Target audience:** Forest and land management agencies & policy makers, custodians of protected areas

**Which category does the tool falls in? (can choose more than one):**

- Collection and use of information on climate change
- Risk and vulnerability assessment
- Research, models and mapping
- Socio-economic and livelihood assessment
- Project planning
- Project monitoring and evaluation
- Economic evaluations
- Capacity building and Education
- Policy and decision-making
- Participatory approach
- Gender inclusiveness

**Links/website:** Example of regional networking – the Eurasian Fire in Nature Conservation: <http://www.fire.uni-freiburg.de/programmes/natcon/natcon.htm>; White Paper: <http://www.fire.uni-freiburg.de/programmes/natcon/EFNCN-White-Paper-2010.pdf>; Practical application: Prescribed Burning in Russia and neighbouring Temperate-Boreal Eurasia: <http://www.forestrybooks.com/>; example Mongolia: <http://www.fire.uni-freiburg.de/GlobalNetworks/CentralAsia/FireEcologyManagementCourse.html>

**Is the tool quantitative/qualitative or a combination of both?** Qualitative

**At which scale can this tool be applied?**

- Global, by sharing experiences, success and failures of local approaches, partnership with UNESCO
- National, by assisting countries to acknowledge the utility of prescribed burning in conservation
- Regional, by sharing experiences, success and failures of local approaches
- Local/Community level: Empowerment of local actors to apply prescribed burning techniques

**Level of effort from 1-5 needed to use the tool (1=least demanding and 5=very demanding)**

1     2     3     4     5

**Is the tool open-source or do fee apply?** Open source, no fees, but travel costs for training courses

**Key contact:** GFMC operations [fire@fire.uni-freiburg.de](mailto:fire@fire.uni-freiburg.de)