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Supplementary

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Taiga fire on Bolshoy Ushkany Island as a model case of forest soil transformation and potential source of eutrophication in Lake Baikal coastal zone

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Fig.S-1. Smoke plume of the fire on Bolshoy Ushkany Island (Aqua MODIS image, June 15, 2015). URL: http://www.forestforum.ru/viewtopic.php?f=24&t=18119)

Fig.S-2. View of the water's edge site when exposing soil sections in the nearshore zone of Severnaya Bay.

Fig.S-3. General view of the slope showing post-pyrogenic erosion processes after a fire in 2015.

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Fig.S-4A. Beach with a ridge of pebbles at the slope foot.

Fig.S-4B. Hole with interstitial waters on the beach (observation point, PO1).

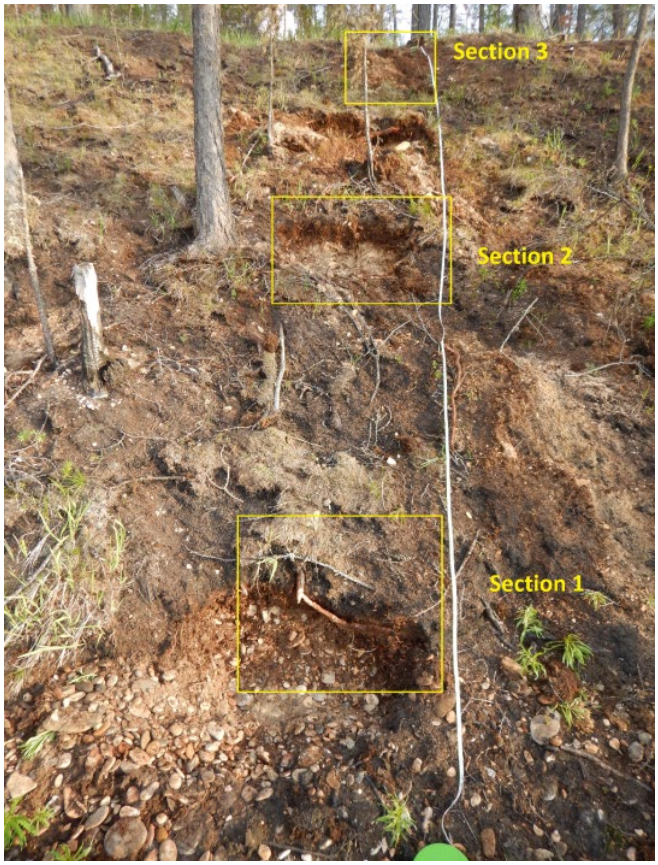

Fig.S-5. Soil sectons 1-3 showing a slope catena at observation point (PO) 1.

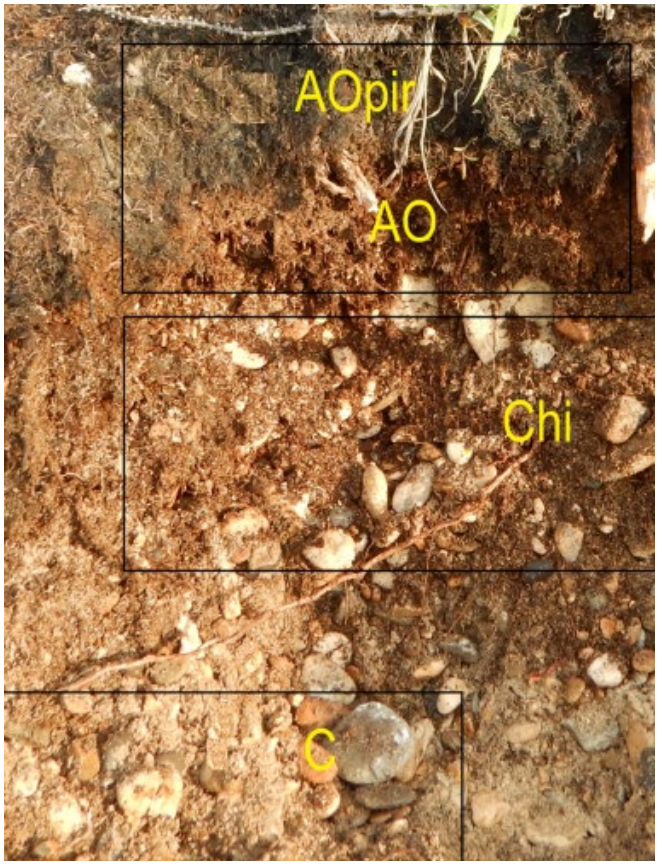

Fig.S-6. Profile of soil section 1 (horizons AOpir, AO, Chi, C).

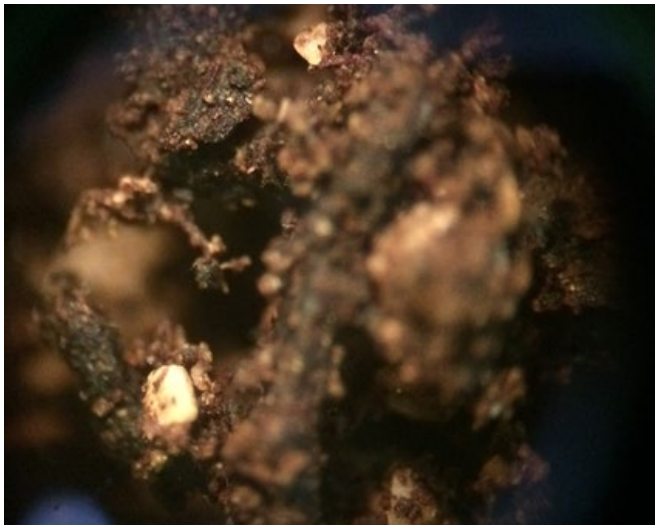

Fig.S-7. Mesomorphological composition of horizon AOpir (soil section 1) carbonized plant debris, clean mineral grains (x40 magnification).

Fig.S-8. Mesomorphological composition of horizon AOpir (soil section 1): fragments of grus with iron coatings, residual carbonates, carbonaceous particles (x20 magnification).

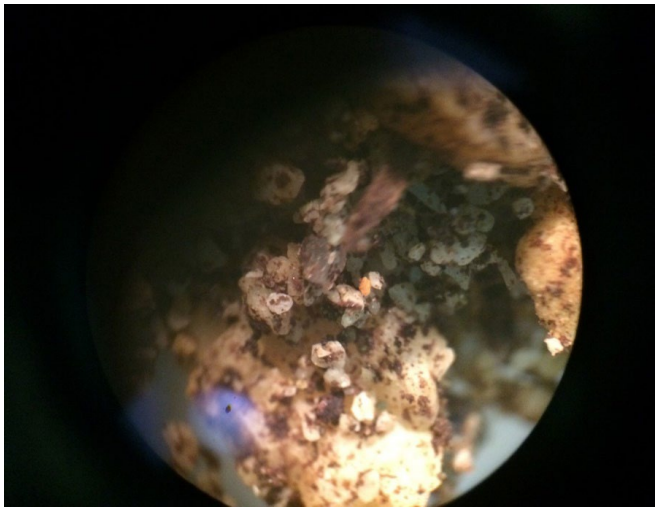

Fig.S-9. Mesomorphological composition of horizon Chi (soil section 1) : mineral grains cemented by humusified matter (x40 magnification).

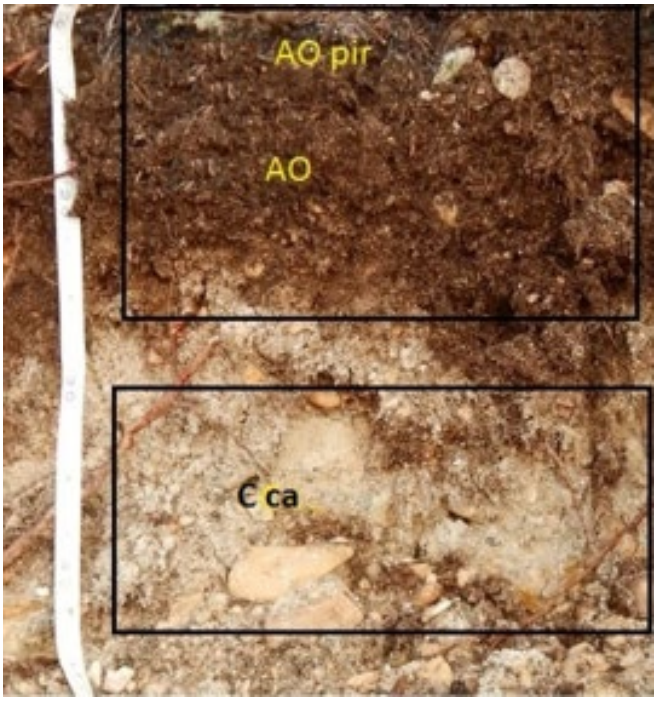

Fig.S-10. Profile of soil section 2 (horizons AOpir, AO, Cca).

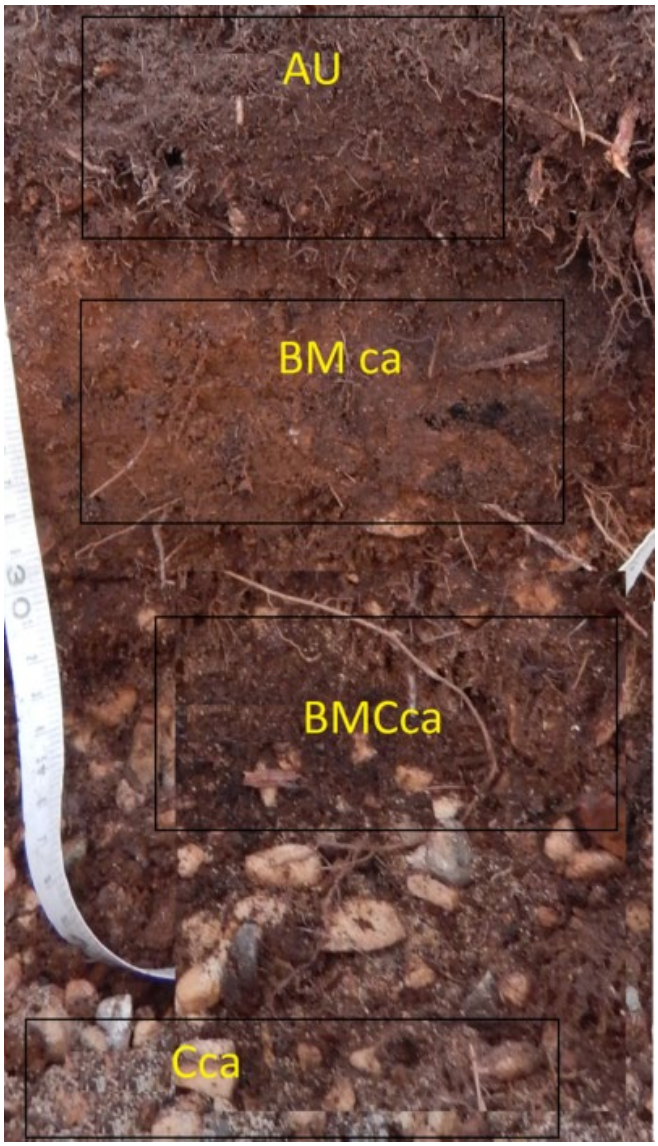

Fig.S-11. Profile of soil section 3 (horizons AU, BMca, BMCca, Cca.

Fig.S-12. Mesomorphological composition of horizon AUpir (soil section 3): effect of high temeprature on mineral mass (brown hue), inclusions of carbonized plant debris (x40 magnification).

Fig.S-13. Mesomorphological composition of horizon BMca, soil section 3 (x40 magnification).

Fig.S-14. Tree stand and grass cover at the location of soil section 4.

Fig.S-15. Burnt anthills at a terraced site.

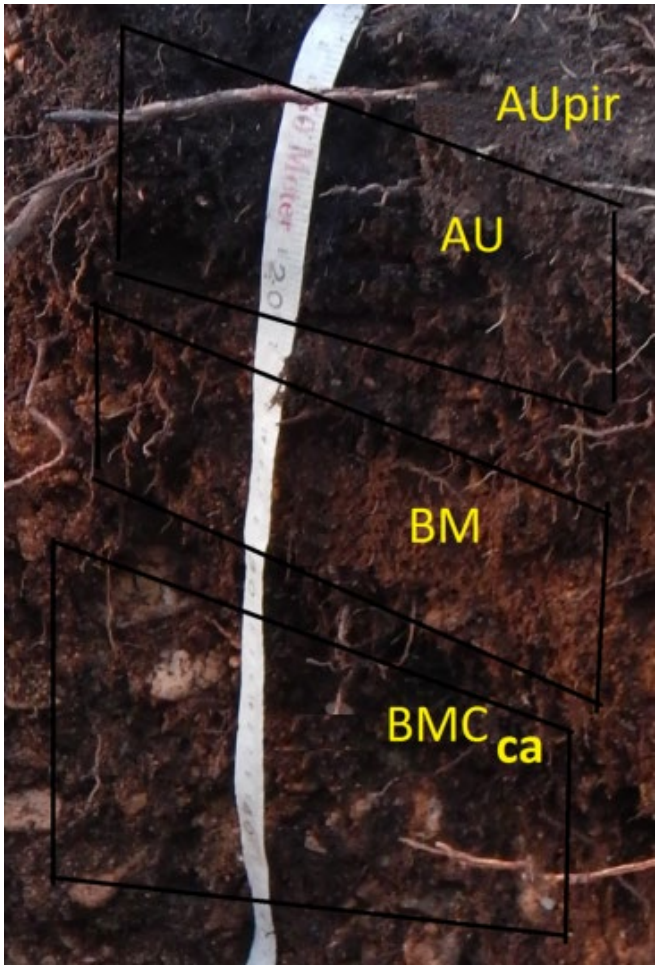

Fig.S-16. Profile of soil section 4 (horizons AUpir, AU, BM, BMCca). It was used as a background model.

Fig.S-17. Upper part of forest litter slightly affected at the location of soil section 4.

Fig.S-18. Mesomorphological composition of horizon AU, soil section 4, inhomogeneous mineral mass (x40 magnification).

Fig.S-19. Tree stand and soil surface at the location of soil section 5, PO2.

Fig.S-20. Anthill burnt out completely, PO2.

Fig.S-21. Washout of a destroyed topsoil plot at the slope edge, PO2. Arrows mark translocation and accumulation of pyrogenetic products and mineral mass at the slope foot.

Fig.S-22. Hole with interstitial waters on the beach (observatin point, PO2).

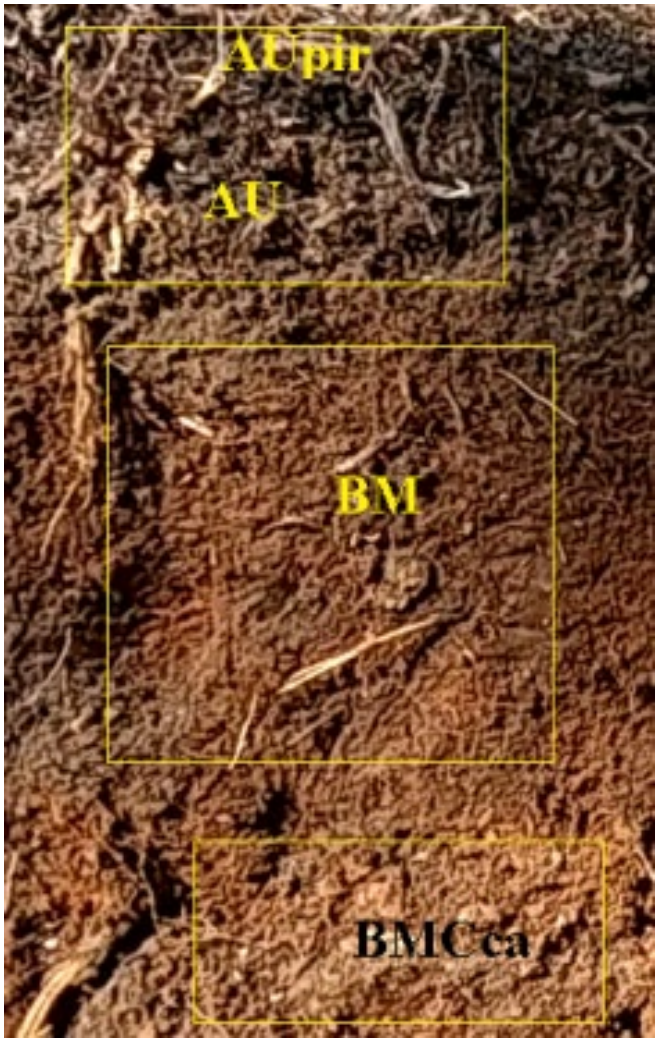

Fig.S-23. Profile of soil section 5 (horizons AUpir, AU, BM, BMCca).

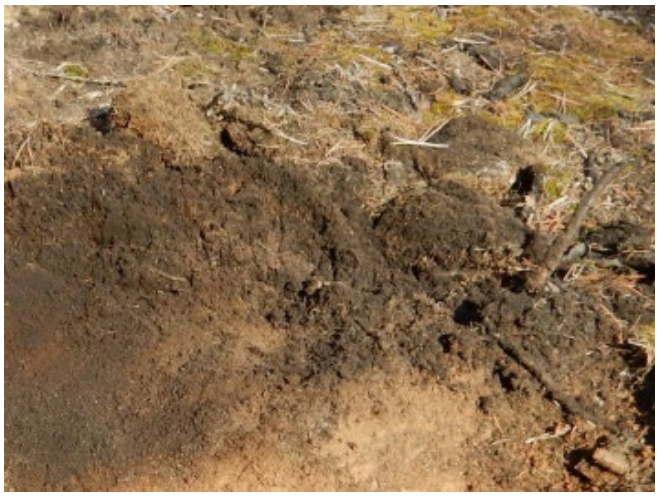

Fig.S-24. A fragment of AUpir horizon, soil section 5.