

Regulating Ecosystem Services	Provisioning Ecosystem Services	Cultural Ecosystem Services
<p>Regulation of physical, chemical, biological conditions</p> <p>Regulation of baseline flows and extreme events</p> <ul style="list-style-type: none"> ▪ Wind erosion reduction and prevention ▪ Hydrological cycle and water flow regulation (Including flood control) <ul style="list-style-type: none"> ○ Regulation of surface water level and runoff ○ Regulation of groundwater level ▪ Water accumulation and retention (incl. flood protection) ▪ Protection from soil erosion ▪ Reduction of wind speed; wind protection ▪ Fire protection <p>Lifecycle maintenance, habitat, and gene pool protection</p> <ul style="list-style-type: none"> ▪ Pollination* ▪ Seed dispersal* ▪ Maintaining nursery populations and habitats* ▪ Biotic production <p>Pest and disease control</p> <ul style="list-style-type: none"> ▪ Pest control and reduction of the spread of invasive species* ▪ Prevention and reduction of diseases* <p>Regulation of soil quality</p> <ul style="list-style-type: none"> ▪ Soil formation ▪ Soil purification and fertility ▪ Soil moisture regulation ▪ Mediation of weathering processes* ▪ Decomposition and fixing processes* <p>Regulation of water quality</p> <ul style="list-style-type: none"> ▪ Regulation of the chemical and physical quality of freshwater in surface waters (standing and flowing) <ul style="list-style-type: none"> ○ Water purification ▪ Regulation of the chemical and physical quality of groundwater <p>Regulation of air/atmosphere quality and climate regulation</p> <ul style="list-style-type: none"> ▪ Microclimate regulation (e.g cooling) ▪ Filtration and purification of air ▪ Air humidity regulation ▪ Carbon sequestration (reduction of anthropogenic CO2 emissions) ▪ Oxygen production <p>Transformation of biochemical or physical inputs</p> <p>Mediation of wastes or toxic substances of anthropogenic origin</p> <ul style="list-style-type: none"> ▪ Bioremediation/cleaning by (micro-) organisms* ▪ Filtration, accumulation, storage by (micro-) organisms* <p>Mediation of nuisances of anthropogenic origin</p> <ul style="list-style-type: none"> ▪ Smell reduction* ▪ Noise attenuation* ▪ Visual screening* 	<p>Biomass</p> <p>Nutritional use</p> <ul style="list-style-type: none"> ▪ Non-timber forest products (berries, mushrooms, medical herbs) ▪ Fishery products (both private and business) ▪ Organic products ▪ Honey (beekeeping) ▪ Agricultural produces (crops/grains/vegetables) ▪ Meat and dairy products by livestock breeding <p>Materials</p> <ul style="list-style-type: none"> ▪ Timber ▪ Construction wood ▪ Hay ▪ Cosmetics ▪ Flowers ▪ Gardening and horticulture products <p>Energetic use</p> <ul style="list-style-type: none"> ▪ Fuelwood / Firewood <p>Fundamental goods</p> <ul style="list-style-type: none"> ▪ Fresh and clean air ▪ Fresh and clean water <p>Genetic material from all types of organisms*</p> <ul style="list-style-type: none"> ▪ Seeds, spores, and other plant materials collected for maintaining or establishing a population* ▪ Individual plants used to breed new strains or varieties* ▪ Individual genes extracted from plants for the design and construction of new biological entities* ▪ Animal material collected to maintain or establish a population* ▪ Wild animals (whole organisms) used to breed new strains or varieties* ▪ Individual genes extracted from organisms for the design and construction of new biological entities* 	<p>Direct outdoor interactions with living/ecological systems in their natural setting</p> <p>Physical and intellectual interactions with biota, ecosystems, and landscapes</p> <ul style="list-style-type: none"> ▪ Tourism ▪ Recreation (e.g in the forest) and sports (swimming etc.) ▪ Health treatment and therapies – aroma and hydro ▪ Ecological education (researching and studying nature) ▪ Bird/animal watching ▪ Source/Place of inspiration ▪ Arts (photography/painting) <p>Spiritual, symbolic, and other interactions with biota, ecosystem, and landscapes</p> <ul style="list-style-type: none"> ▪ Aesthetic value ▪ Spiritual value ▪ Traditional, and cultural value ▪ Wood-based traditional crafts (willow branches, wooden toys) ▪ Decoration for fests and holidays

Table 1: Roztochya BR Ecosystem Services; Classification based on CICES, Haines-Young & Potschin (2017), contents by workshop participants

*added by the author based on CICES