New tools and methods

Ecological peace corridors to conserve human and biological diversity

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Ecological peace corridors (EPCs), a new conservation strategy, are a crucial tool for preserving biodiversity and ensuring peacekeeping. These corridors can facilitate wildlife movement and genetic exchange, counteracting the fragmentation caused by human activities. In a highly anthropized world with increasing conflicts and a global call for expanding protected areas, we must re-evaluate the importance of corridors. The importance of EPCs will grow as habitat fragmentation increases, highlighting the need for proactive conservation strategies and sustainable land-use planning. Considering also the global call for the 30x30 initiative to expand protected areas and the efforts towards rewilding and land-sharing strategies together with the renowned interest in buffer zones, the EPC framework can help reduce conflicts by providing neutral spaces, thus enhancing safety for humans and wildlife. These efforts can boost habitat connectivity, genetic diversity, and ecosystem resilience, aligning with global conservation goals. EPCs, by promoting biodiversity preservation and geopolitical stability, offer a comprehensive solution to challenges like biodiversity loss, climate change, and human conflict. Their successful implementation requires international cooperation, long-term planning, and a commitment to both ecological and human well-being.

In the contribution, I will suggest some ideas for identifying EPCs with the help of AI-ML in combination with a system similar to the Italian zonation of National Parks as a model for planning EPCs, balancing conservation and human needs.

EPCs can address environmental and geopolitical challenges in conflict zones by removing military infrastructures, restoring vegetation, establishing patrolled corridors, fostering biodiversity conservation and peacebuilding. This approach not only benefits ecosystems and wildlife but also promotes cooperation and trust among neighbouring countries, paving the way for sustainable development and peace in conflict-affected areas.

