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The Impact of Natural Disasters and War on Beekeeping: Challenges and Strategies for Preservation

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Bees and other pollinators are essential for biodiversity, supporting ecosystems and food production. However, habitat loss, pesticide use, climate change, natural disasters, and wars are driving their decline, threatening global food security.

Wildfires in Australia (2019–2020) destroyed 68% of New South Wales' national parks, severely impacting honeybee populations. In Greece, the 2021 North Evia fires burned 520,000 acres and 6,500 beehives, drastically reducing pine honey production. Portugal's 2023 wildfires damaged beekeeping areas, prompting government aid. In 2024, hurricanes Helen and Milton in the U.S. wiped out 95,000 hives across Florida, Georgia, and the Carolinas, affecting over 2 billion bees. Emergency relief efforts by Greater Good Charities and Mann Lake Bee & Ag Supply provided pollen substitutes, syrup, and sugar to prevent colony starvation.

In Ukraine, the ongoing war has devastated beekeeping. Explosions, shelling, and fires have destroyed apiaries in Donetsk, Luhansk, Kharkiv, Mykolaiv, Zaporizhzhia, Kherson, and Odesa regions. Toxic weaponry contaminates plants and water, killing bees. Military activity damages soil, forests, and meadows—key nectar sources. Landmines and occupation prevent beekeepers from accessing hives, while economic instability and beekeeper displacement further threaten the industry.

According to the Brotherhood of Ukrainian Beekeepers NGO, by 2023, over 30% of Ukraine's apiaries had been destroyed in combat zones and occupied territories. Russian aggression has polluted vast areas with landmines, unexploded ordnance, and military debris, significantly deteriorating the condition of melliferous plants in eastern Ukraine.

Efforts to support beekeeping include relocating apiaries to safer regions, rehabilitating war-damaged land, and providing international aid. FAO, charitable organizations and NGOs supply beekeepers with equipment, financial assistance, and bee colonies.
The Brotherhood of Ukrainian Beekeepers NGO and the Charitable foundation "Help on Bee Wings" have been helping Ukrainian beekeepers since 2022 with the support of partners from around the world.

Raising international awareness about the destruction of bee populations and the economic devastation of beekeepers due to natural disasters and wars is crucial. Global cooperation, experience exchange, and preventive action will help develop strategies for habitat restoration and long-term resilience in beekeeping. Early warning technologies, pollinator-friendly landscape recovery, and protection of wild bees must become global priorities.