

Refugee Crisis And Extinction Of Species

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Editorial Note: Two Distinct Global Questions

The title of this paper places the refugee crisis beside the extinction of species. These are both urgent global problems, but they should not be treated as though they are one topic or as though refugees are a general cause of biodiversity loss. Forced displacement is primarily a humanitarian, political, and legal issue arising from persecution, conflict, violence, and collapsing protection. Species extinction is an ecological crisis driven mainly by land- and sea-use change, direct exploitation, climate change, pollution, and invasive alien species. In particular locations, conflict and sudden population movement may place pressure on forests, water, or wildlife, while environmental degradation can also contribute to insecurity and displacement. Those connections require case-specific evidence.

The most coherent way to preserve the original assignment is to treat it as an annotated research review in two parts. The first evaluates literature on extinction and de-extinction. The second evaluates literature on refugees, non-refoulement, deterrence, and the historical meaning of a "crisis." Each source is considered for its argument, method, usefulness, and limitations rather than being praised merely because it is peer reviewed.

Part One: Species Extinction and De-Extinction

The Contemporary Biodiversity Crisis

Extinction is a natural part of evolutionary history, but current concern focuses on the speed and causes of loss. The 2019 Global Assessment by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services concluded that nature is declining at rates unprecedented in human history and estimated that around one million animal and plant species are threatened with extinction, many within decades. The assessment did not claim that one million extinctions had already occurred. It estimated threat based on available knowledge of species, habitats, abundance, and drivers.

The language of a "sixth mass extinction" is widely used, but it should be handled carefully. Five major mass extinctions are recognized in the fossil record. The end-Permian event, about 252 million years ago, was the most severe known episode. The end-Cretaceous event about 66 million years ago eliminated non-avian dinosaurs and many other forms of life. Current extinction rates are greatly elevated compared with long-term background rates, yet scholars debate whether the threshold for a

completed mass extinction has already been crossed. The debate over terminology should not distract from documented declines.

Conservation decisions occur under scarcity. Governments and organizations cannot fund every possible intervention equally. De-extinction technology therefore raises not only a scientific question—can a lost organism be approximated or recreated?—but also an ethical and budgeting question: what should be done with limited conservation resources?

Siipi and Finkelman: What Would It Mean to Reverse Extinction?

Helena Siipi and Leonard Finkelman’s article, “The Extinction and De-Extinction of Species,” is valuable because it slows down a discussion often dominated by spectacular announcements. Popular accounts may say that scientists will “bring back” a mammoth, passenger pigeon, or thylacine. The authors ask what such language means philosophically.

They distinguish several possible interpretations. A project might create organisms with selected traits of an extinct species through genetic editing. It might clone an organism if sufficiently intact genetic and cellular material exists. It might produce a new population that performs a similar ecological role. These outcomes are not necessarily identical to restoring the original species. An organism’s identity involves ancestry, genome, development, behavior, microbiome, social learning, and ecological relationships.

The article is useful for defining terms before evaluating claims. If a genetically modified elephant resembles a woolly mammoth in cold tolerance, has mammoth extinction literally been reversed, or has a new kind of elephant been engineered? Different answers lead to different ethical conclusions.

The article’s limitation is that conceptual clarification cannot determine ecological feasibility by itself. Even a philosophically coherent “revived” species needs habitat, sufficient individuals, genetic diversity, animal-welfare protection, disease assessment, and long-term management. The source should therefore be paired with conservation biology and population ecology.

Iacona and Colleagues: De-Extinction as a Conservation Decision

Gwenllian Iacona and colleagues move the discussion from identity to management. Their article asks what conservation agencies would need to do if revived species were released or maintained. A recreated organism would not become self-sustaining simply because birth or cloning succeeded. Managers would need to identify habitat, control threats, monitor survival, establish populations, and maintain genetic health.

The authors use conservation-prioritization thinking to compare the likely costs and benefits of de-extinction. This is an important contribution because biotechnology projects may receive public attention and private investment while less dramatic species disappear for lack of routine habitat protection. A revived species could attract new money and serve as a flagship for a landscape. It could also redirect existing budgets away from living threatened species.

A related analysis published in *Nature Ecology & Evolution* modeled the opportunity cost of funding revived species and warned that using existing conservation budgets could lead to a net loss of biodiversity. (Bennett et al., 2017) The result does not prove that every de-extinction project is harmful. It demonstrates that the source of funding and the continuing cost of management must be made explicit.

This article is especially useful for a policy paper. It offers questions that decision-makers can apply: Is suitable habitat available? Has the original threat been removed? Which living species would lose support? Is the project financed with genuinely additional funds? What happens if the population remains permanently dependent on intensive management?

Simon and Wildavsky: Skepticism About Species-Loss Estimates

Julian Simon and Aaron Wildavsky's "Species Loss Revisited" represents a skeptical position. The authors challenged estimates of extinction that they considered speculative and criticized the use of uncertain numbers in environmental debate. Including a skeptical source can strengthen a review because it forces researchers to examine how estimates are produced.

Its age and framing, however, require caution. The article was published in 1992, before major advances in global biodiversity databases, remote sensing, genetic tools, and the large IPBES assessment. Uncertainty in the exact number of species does not imply that habitat destruction and population decline are harmless. Modern assessment uses multiple indicators rather than relying on one dramatic estimate. (IPBES, 2019)

The source is most useful as a lesson in scientific communication. Researchers should state assumptions, ranges, and limitations. They should distinguish documented extinctions from species assessed as threatened and from species likely to be lost under future scenarios. Skepticism becomes productive when it improves measurement; it becomes misleading when uncertainty is treated as evidence that no action is needed.

What the Extinction Literature Suggests

The reviewed scholarship does not support de-extinction as a replacement for conventional conservation. Protecting habitat, reducing exploitation, controlling invasive species, restoring

ecosystems, and addressing climate change remain central. De-extinction may contribute scientific knowledge or support selected restoration projects, but the ethical standard should be comparative: will the intervention produce more ecological benefit than alternative uses of the same resources?

Animal welfare deserves separate attention. Cloning and reproductive experiments can involve failed pregnancies, abnormalities, and suffering among surrogate animals. A project cannot be justified only by future ecological benefit without considering the animals used to create it.

Part Two: Refugees Escaping War and Persecution

Who Is a Refugee?

Every displaced person is not legally classified as a refugee. Under the 1951 Refugee Convention and its 1967 Protocol, a refugee is generally a person outside the country of nationality or former habitual residence who is unable or unwilling to return because of a well-founded fear of persecution connected to race, religion, nationality, membership of a particular social group, or political opinion. Regional instruments and domestic laws may provide broader protection.

An asylum-seeker is someone requesting international protection whose claim has not yet received a final decision. An internally displaced person has fled home but remains within the country. A migrant may move for many reasons and does not automatically meet the refugee definition. These distinctions matter legally, but every person remains protected by basic human rights.

UNHCR reported 117.8 million forcibly displaced people worldwide at the end of 2025, including 41.6 million refugees, 9 million asylum-seekers, and tens of millions displaced within their own countries. Numbers change as conflicts begin, continue, or resolve, so the date and category should always accompany a statistic.

Ormsby: The Refugee Crisis as a Civil Liberties Crisis

Eric Ormsby's Columbia Law Review Note argues that policies designed to deter refugees can erode civil liberties more broadly. (Ormsby, 2017) The article examines practices in the United States, Hungary, and Australia and connects refugee exclusion with restrictions affecting attorneys, advocates, association, privacy, and public accountability.

The article's strongest contribution is its refusal to treat refugee rights as isolated from the legal culture of the receiving state. A government that creates zones of secrecy, blocks access to counsel, or expands surveillance at the border may establish tools later used against citizens and lawful residents. Emergency language can normalize exceptional powers.

The source also explains non-refoulement, the principle prohibiting return to a place where a person

faces persecution, torture, or other serious and irreparable harm. Non-refoulement does not require every asylum claim to be accepted. It requires access to a fair process before removal to danger.

As a legal Note, the article is strongest in doctrinal and comparative argument rather than empirical measurement of public opinion or long-term policy outcomes. It should be paired with court decisions, government data, and UNHCR guidance. Its value lies in showing that the treatment of outsiders tests the reliability of rights at home.

Lucassen: Peeling the Historical Onion

Leo Lucassen asks why European political debate in 2014–2016 became so alarmed when the continent had experienced earlier and, in some respects, larger displacement episodes. (Lucassen, 2018) He compares the recent “refugee crisis” with movements after World War II, decolonization, the Cold War, and the wars in the former Yugoslavia.

His historical approach challenges the idea that Europe had never confronted substantial refugee arrivals. The label “crisis” may describe genuine pressure on reception systems, housing, schools, and border procedures, but it also reflects political interpretation. Numbers that appear unmanageable in one period may be incorporated successfully over time.

The onion metaphor suggests that several layers must be separated: the number of arrivals, speed of movement, state capacity, media coverage, public fear, party competition, and the distribution of responsibility among countries. The article is useful because it provides comparison rather than accepting present-day exceptionalism.

Its limitation is that historical analogy can understate differences. Contemporary asylum systems, security concerns, travel routes, labor markets, and European institutions differ from the postwar period. Comparison should identify both similarity and difference rather than suggesting that history repeats exactly.

Dangerous Routes and the Policy of Deterrence

People fleeing conflict may use unsafe boats, deserts, smugglers, or hidden transport because lawful routes are unavailable. The existence of smuggling networks does not mean refugees prefer danger. Carrier sanctions, visa restrictions, closed borders, and limited resettlement can leave no safe path to ask for protection.

Governments have legitimate interests in managing borders, identifying applicants, and addressing security. Those interests do not cancel the duty to rescue people at sea, avoid collective expulsion, and assess protection claims fairly. Deterrence becomes ethically and legally problematic when suffering is deliberately made part of the policy so that others will be discouraged from coming.

Opening borders without planning is not the only alternative to exclusion. States can expand resettlement, humanitarian visas, family reunification, regional support, timely asylum decisions, employment access, and funding for host communities. Most refugees are hosted in countries near the conflicts from which they fled, not in the wealthiest states.

Durable Solutions

Humanitarian reception is essential but does not resolve displacement by itself. UNHCR traditionally identifies three durable solutions: voluntary return in safety and dignity, local integration where possible, and resettlement to another country. Each has limitations. Return is impossible while persecution or war continues. Local integration may face legal and political resistance. Resettlement places are available to only a small portion of refugees.

Long-term displacement requires education, legal status, healthcare, livelihoods, and participation. Keeping people dependent in camps for years wastes skills and creates avoidable harm. Host communities also need investment so that support for refugees does not intensify existing shortages.

Can the Two Topics Be Connected?

There are legitimate areas of connection between forced displacement and biodiversity, but they should be studied directly. Armed conflict can damage protected areas, increase illegal extraction, disrupt wildlife management, and displace conservation staff. Large temporary settlements may require fuel, water, and land, especially when humanitarian agencies lack resources for sustainable infrastructure. At the same time, environmental conservation can harm people when protected areas are created through forced eviction or when refugees are blamed for degradation caused mainly by commercial actors.

Climate change and ecosystem decline can intensify livelihood insecurity and conflict risk, yet international refugee law does not currently recognize “climate refugee” as a general Convention category. Some people displaced by disasters remain inside their countries; others may qualify for different forms of protection depending on circumstances. Researchers should avoid using environmental language to erase political responsibility for persecution and war.

The ethical link is the management of vulnerable life under scarcity. Conservation asks which species and ecosystems receive protection; refugee policy asks whose safety and legal claim will be recognized. In both fields, numbers can make suffering abstract. The response must combine evidence, rights, and fair allocation rather than treating displaced people or threatened species as obstacles to economic convenience.

Conclusion

The extinction literature shows a severe and accelerating biodiversity crisis, while also warning that dramatic technologies such as de-extinction may divert attention from living species and habitat. Siipi and Finkelman clarify what revival could mean; Iacona and colleagues demonstrate the management and opportunity costs; and skeptical literature reminds researchers to communicate uncertainty precisely.

The refugee literature shows that forced displacement is not historically new, even though current numbers and crises are immense. Ormsby connects deterrence with broader civil liberties, while Lucassen places political alarm in historical perspective. The principle of non-refoulement remains central because protection has little meaning if a person can be returned to danger without a fair assessment.

These are separate fields and should remain analytically distinct unless evidence establishes a connection in a particular case. Both, however, require societies to decide whether short-term political and economic convenience will outweigh obligations to preserve life, dignity, and the conditions on which future communities depend.

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