
At the root of all religions are the same basic principles. Live simply. Act with compassion. Be kind to one another. Nowhere does any religion say that we should destroy the very thing that gives us life. So, I feel quite confident saying that from a religious point of view, we must conserve all life and protect Earth.

H.H. 17th GYALWANG KARMAPA, OGYEN TRINLEY DORJE

EXECUTIVE SUMMARY

The United Nations (UN) Decade for Biodiversity (2011-2020) is a global impetus geared at re-orienting society towards recognizing the value of biodiversity and conserving it. Religious institutions have already begun to show notable interest in and to take action toward reversing the environmental crisis in general and halting the loss of biodiversity in particular. Amidst these endeavors by religious institutions however, we call for a holistic reappraisal of practices within their fold to address any that might impede global progress to save biodiversity. For example, a practice by Buddhists and Daoists that raises concern is fang sheng—the Chinese term for the act of releasing captive wildlife as an act of compassion. The manner in which ‘animal release’ is practiced raises concern for biodiversity that conflicts with the ritual’s aim of compassion. ‘Animal release’ causes several adverse effects on biodiversity including the spread of invasive species, genetic swamping, extreme animal suffering, competition, vulnerability to predation, disease, and human health concerns. Aware of these adverse effects, the Religion and Conservation Research Collaborative (RCRC) of the Religion and Conservation Biology Working Group (RCBWG), Society for Conservation Biology (SCB) concludes that the religious practice of ‘animal release’ poses risks to the future of biodiversity in Asia and other parts of the world where currently practiced. The RCRC recommends a targeted awareness campaign that emphasizes the problems associated with ‘animal release’ and the most pragmatic alternative practices that maintain both spiritual and ecological integrity.
Context and the Importance of the Problem

The threats to biodiversity are real and its ongoing global loss has eluded the 2010 target set by governments to reduce biodiversity loss. This prompted the 193 Parties to the Convention on Biological Diversity (CBD) to create a strategic plan for the next decade during the 10th Conference of the Parties (COP 10) to the CBD in Nagoya, Japan in 2010. Known as the Aichi Targets, this plan set measurable goals to address the failed attempt to mitigate biodiversity loss. Among these goals are: (a) Initiating action to address the underlying causes of biodiversity loss; (b) taking action now to decrease the direct pressures on biodiversity; and, (c) continuing direct action to safeguard and, where necessary, restore biodiversity (the full variety of life) and ecosystem services (the benefits people receive from the functioning of ecosystems).1 The CBD recommended these goals to the United Nations (UN) General Assembly which subsequently declared 2011–2020 the UN Decade for Biodiversity.

In 2012, 31 international scientists issued a call for human societies to change course and steer away from critical tipping points in the Earth system that might lead to irreversible change. These scientists urged a “fundamental reorientation and restructuring of national and international institutions toward more effective Earth system governance and planetary stewardship.”2 Religious institutions have begun to respond to this call by demonstrating a noteworthy motivation and commitment to reverse the environmental crisis generally and the ongoing loss of biodiversity in particular.3,4 The high ethical standards expected of religious communities and institutions require a holistic response to the crisis so that any discrepancies between word and deed (e.g., arising through traditional ritual) are minimized or eliminated altogether.

The Religion and Conservation Research Collaborative (RCRC) of the Religion and Conservation Biology Working Group (RCBWG), Society for Conservation Biology (SCB) concludes that practices of animal release (fang sheng in Chinese, ho-jo-e in Japanese, and tche thar in Tibetan)5 by Buddhists, Daoists, and other religions are detrimental to biodiversity and are causing increasing concern.6,7,8 For example, some Buddhists practice fang sheng by releasing captive wildlife as a demonstration of compassion and kindness. This practice occurs throughout Asia (e.g., in Taiwan, Sri Lanka, Thailand, Japan, Korea, Singapore, Cambodia, China, Vietnam, Hong Kong, Tibetan Autonomous Region, and Malaysia) and, in recent decades, in western countries (e.g., Canada, Australia, and the USA).5,7 The motivation behind the practice has several dimensions.5 Notable among these motivations is cultivating compassion for all forms of life, while expressing good wishes for the well-being and longevity of the practitioners and their familial relations, both living and deceased.5 One Buddhist Pure Land Temple in
Vancouver, British Colombia, has practiced ‘animal release’ for 13 years and claims to have released a total of 25,000 pounds of sea creatures into the Pacific Ocean.\(^5\) The Buddhist China Preserve Life Association asserts that it released more than 20 million animals in 2008 during 300 ceremonies, the vast majority of which were small aquatic creatures.\(^6\) Religious groups in Taiwan spend more than US $6.19 million annually to engage in ‘animal release’ rituals which, according to the Environment and Animal Society of Taiwan (EAST), is practiced 750 times on average each year.\(^9\) EAST further estimates that more than 200 million animals are included annually in ‘animal release’ rituals in Taiwan.\(^9\)

Knowing that many religious adherents are unaware of the adverse effects of ‘animal release’ on biodiversity, the RCRC takes this opportunity to identify the associated problems, declare our position as a body of concerned professionals and suggest appropriate alternative practices based on consultations with religious adherents, conservation scientists, and literature reviews, that will support both spiritual and ecological integrity. This position paper is ultimately aimed at engaging the religious community, government and society in dialogue for a consensual resolution of the problem.

**Environmental, Ecological and Health Concerns**

The manner in which ‘animal release’ is currently practiced raises concerns for biodiversity and ecological integrity that negate the ritual’s actual aim of compassion. There are several consequences of ‘animal release’ that raise concern and they include: (1) The spread of invasive alien species (those that cause harm to native species or ecosystems); (2) genetic swamping (which occurs when two genetically isolated populations come into contact and the genes from the larger population reduce the genetic diversity of the smaller population); and, (3) the spread of disease coupled with human health concerns.

**Invasive species:** Liu, McGarrity, and Li (2009) showed that the organized, Buddhist release of American bullfrogs (*Rana catesbeiana*) (native to eastern North America and listed among 100 of the World’s Alien Invasive Species by the International Union for Conservation of Nature) in water bodies in Yunnan Province, China, caused invasion of these waters resulting in significantly higher populations than water bodies where release events did not take place.\(^7\) Higher populations of American bullfrogs indicate they may have out-competed the native species in the water bodies surveyed in Yunnan Province. Bullfrogs are generalist predators and are vectors of the disease chytrid fungus which is mainly responsible for global amphibian decline.\(^7,10\)
Genetic swamping: Birdlife International reports that the increase in hybrids in the wild has been heightened by release of Chinese Bulbuls (*Pycnonotus sinensis*) for religious purposes.\(^{11}\) As a result Taiwan Bulbuls (*P. taivanus*) are increasing in rarity in the wild, and there is danger of their disappearance through genetic swamping by Chinese Bulbuls.

Human health concerns: The contact between humans and animals in the ‘animal release’ ritual poses a high risk of humans contracting diseases from these animals. Gutiérrez and Buchy for instance, investigated the potential role of the Eurasian Tree Sparrow (*Passer montanus*) in the spread of Highly Pathogenic Avian Influenza (HPAI) H5N1 virus in Cambodia.\(^{12}\) The findings from their experiment suggest that due to the presence of significant quantities of H5N1 virus on Eurasian Tree Sparrow feathers, the merit-release bird rituals represent a risk for human contamination in countries where the avian influenza virus is spreading.

Ethical Concerns

Exploitation of animals due to commercialization of the ‘animal release’ practice raises ethical concerns. As is often the case, animals needed for this ritual need to be specially ordered, thereby leading to the capture of animals in the wild. And if the supply is insufficient to meet demands for the periodical ritual, animals have to be obtained from other regions or countries. EAST outlined the sequence for catching and releasing birds for ceremonial purposes in Taiwan: (1) Orders are made by the Buddhist organizations; hunters catch birds; wholesalers collect the captive birds; (2) birds are sold to the retailers; (3) retailers sell birds to Buddhist organizations; (4) birds are released in a ceremony; and, (5) hunters wait to catch the released birds.\(^{13}\) The case of hunters waiting to catch released birds is not restricted to Taiwan but is also reported to occur in Cambodia\(^{14}\) and Australia.\(^{15}\) This practice contradicts the aim of liberating animals based on the original intention of acting with compassion. Animals die during capture and, when held in captivity, may be denied adequate food and water. High mortality occurs when ordering, shipping and keeping animals until the day of ceremonial release. Furthermore, animals released into a non-native environment results in abnormally high death rates.\(^{5}\) Shiu and Stokes cited the Chinese newspaper *Sing Tao Daily* as having reported that 8000 birds were found dead in the Baiyun area in Guangzhou, where many people go on weekend mornings to release birds and pray for merits.\(^{5}\) The Institute of Supervising Animal Epidemic Control of Guangzhou declared that the death rate of released birds is 90% or higher.\(^{5}\)

Hence, contrary to the compassionate intentions of releasers, merit release as currently practiced is a direct cause of extensive animal suffering, even mortality.
Positions

Based on the associated problems and consequences of the religious practice of ‘animal release’ or *fang sheng* on biodiversity and ecological integrity, the urgent mandate of the CBD in the UN Decade for Biodiversity, the mission and strategic priorities of the Society for Conservation Biology (SCB), and our genuine respect and recognition of faith-based organizations in Asia and around the world and their efforts to conserve biodiversity, the Religion and Conservation Research Collaborative (RCRC) of the Religion and Conservation Biology Working Group (RCBWG) SCB takes the following position:

1. The religious practice of ‘animal release’ poses risk to the future of biodiversity and ecological integrity in Asia and other parts of the world where this ritual is currently practiced given its constancy, the scale of the releases and the associated problems mentioned above.

2. We recognize that faith-based organizations are sincere in their intentions and have the capacity to adjust their approach to ‘animal release’ given the aforementioned problems that oppose their ritual’s aim of compassion.

3. Conservation and faith-based organizations should work together to realize the best possible outcomes in solving the problem of ‘animal release’ where both spiritual and ecological integrity remain valued and are not violated.

Recommendations

Religious adherents have the potential to evolve a new and sustainable approach to ‘animal release’. For example, a new form of animal release practice is gaining root in Singapore, where religious adherents (1) release marine animals that would have become seafood and (2) use captive-bred animals from aquaculture. These practitioners claim that marine animals will not cause ecological damage because they belong to the environment into which they are released and that these releases do not contribute to wild catches. While these justifications are over-simplistic, they do show that the Buddhist community is progressive and will adapt their practices in the light of factual information from science.
The RCRC therefore recommends the following:

1. Faith-based organizations in collaboration with conservation organizations provide wide publicity and education on the detriments of ‘animal release’ and sustainable alternative practices.

2. Since religious leaders and conservationists share similar values, both parties can build on this by organizing religious release activities that promote the goals of conservation. For example, government or conservation NGOs could sponsor breeding programs for native species at risk and work with local temples to hold ceremonial release or reintroduction events in appropriate habitats (Liu et al. 2012).

3. Groups or individuals interested in getting more information on biologically sound animal release opportunities should contact the SCB Chapters and Section leaders who would be able to connect interested parties with nearby scientists or conservation offices.

In order to achieve the above, collaboration and partnerships are needed globally and regionally among interested parties in the religion and conservation circles. The global urgency before us calls for a new awakening of responsibility and purposeful stewardship of life on Earth for the future of biodiversity, our children and our planet.

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