

this conservation application is by creating forest plantations with various plant species to create different forest types. Forest plantations as natural forest buffer areas can become habitats for animals, especially birds. KPH Probolinggo has five forest types: teak, mahogany, damar, pine and kesambi. This study aimed to determine the diversity and composition of birds in the various forest types. The study was conducted in three BKPH (forest management units), i.e. Bermi, Sukapura, and Kabuaran. Data were collected from 17 June–17 July 2014 using 1-km transects. Species diversity was analysed using the Shannon-Wiener Diversity Index to determine the species diversity of birds, and variation of species composition was analysed using Sorensen's similarity and cluster analysis using Biodiversity Professional Software. The analyses showed that the diversity of bird species in each forest type was different: the pine forest 2,94; kesambi forest 2,93; mahogany forest 2,69; teak forest 2,42; and damar forest 2,75. The composition of bird species in each forest type varied: this was seen from the formation of four clusters and differences in bird communities between the various forest types. The highest diversity was in pine forest with complete age classes. Forest management is planned to complete the age classes in the other forest types.

### **Ivory and rhino horns consumption and consumers in Asia with a focus on China and Vietnam**

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There is a high demand for wild animals and products made from them worldwide. Despite efforts undertaken by governments, non-governmental organisations and other parties to tackle unsustainable wildlife consumption, the consumption of wildlife products, including threatened species, in China and Vietnam has risen rapidly. Law enforcement action to apprehend poachers and illegal traders is the primary mechanism stemming these crimes. However, enforcement action alone may not be sufficient to eliminate this threat in the long term. The nature of the market is changing rapidly, with economic growth stimulating a status-driven consumption that goes beyond traditional uses. Consumption is now about complex social issues such as lifestyle, recreational choices, social, corporate status and aspirations. This research provides the first in-depth and comprehensive review of a wide range of communication materials that reached hundreds of millions of people across major markets in Southeast Asia, particularly Vietnam and China to raise awareness about rhinoceros horn consumption and its impact. It mapped the demand-reduction activities that are currently planned for major market countries for rhinoceros horn and ivory; identified values could be added to different approaches; identified distinct interventions that could be made more mutually supportive and complementary; and determined ways to avoid sending conflicting messages to the public. Some of the most successful techniques in changing consumer behaviour in other sectors have also been documented, including sustainable lifestyles, consumer choice and public health, and these can be adapted to reduce demand for elephant and rhinoceros products.

### **Patterns of Human–Elephant Conflict and mitigation techniques in Cambodia**

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Human–Elephant Conflict (HEC) is a major threat to the Endangered Asian elephant *Elephas maximus* in Southeast Asia due to land use changes and human population increases. Settlement, agricultural expansion and development in and around elephant habitat have brought humans and elephant into increasing contact. Elephants raid crops and destroy property, negatively impacting people's livelihoods and possibly incurring injuries or death as a result of retribution. The Cambodian Elephant Conservation Group (CECG) was established in 2005 as a tripartite collaborative partnership between the Forestry Administration, Ministry of Environment and Fauna & Flora International in part to help mitigate HEC in Cambodia. The CECG team has helped community members across Cambodia to use different and changeable tools to harmlessly deter elephants away from their crops. Here, we present the results of the past three years of monitoring patterns of HEC across Cambodia, and report on the activities we have undertaken to help people mitigate HEC. As result of our efforts, affected local communities

are more tolerant, adaptive and coexist in the areas close to elephant habitats. There has been no reported retaliatory killing of an elephant in the areas in which we have been working.

### **The Karen Wildlife Conservation Initiative (KWCI): wildlife and forest conservation in Karen State, Burma**

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Myanmar is currently in a period of political transition and as a result has lifted many restrictions on international travel to certain parts of the country. The region is a biodiversity hotspot and the Myanmar Government has had support from key international conservation organisations for many years, with more planning to engage with the government to support wildlife and forest conservation. However, the country still has ongoing regional disputes, with continued conflict or temporary ceasefires in place. Karen (Kayin) State is one such region, bordering Thailand's expansive forest complexes, where decades of military conflict have killed and displaced thousands of Karen, although a fragile ceasefire is currently in place. Much of this region is natural forest landscapes with high biodiversity, but there is limited access to data on the distribution or abundance of key conservation concern species due to a lack of capacity in the local governing administration (The Karen National Union) and their forestry department to undertake surveys, and a general and understandable suspicion and reluctance to then disseminate data or allow access to these regions to unknown organisations. While political negotiations on access continue, the wildlife and forest of the region are in peril from: increased hunting of prey species as displaced Karen return; targeted poaching of illegally traded species; illegal forestry; gold mining; and dam construction. KWCI was created as a partnership initiative to immediately increase the capacity of the Karen for surveying and protection of these unique habitats.

### **Diet and reproductive phenology of cave nectar bat *Eonycteris spelaea* in Cambodia and its conservation implications**

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The diet and reproductive phenology of cave nectar bats *Eonycteris spelaea* are unknown in Cambodia. These were investigated at a colony inhabiting the Bat Khteas cave, Chhngauk Mountain (Kampot Province, southern Cambodia). Monthly sampling was undertaken from February to July 2014 that included: (1) Live-trapping to determine changes in reproductive status over time; (2) Collection of faecal samples from the cave to identify the plant species consumed by the bats by their pollen; and (3) Direct observations and interviews to determine human impacts on the colony. The diet of *E. spelaea* in southern Cambodia includes at least 18 plant species, a broader diet than that known for the species from southern Thailand. The most important dietary species were: mangrove apples *Sonneratia alba* (up to 44.8% per month), petai *Parkia speciosa* (up to 41.2%) and bananas *Musa truncata* (up to 35.6%). Reproductive data suggest that *E. spelaea* mainly gives birth in January and May–June in Kampot, in contrast to North Vietnam where birth peaks occur in March–April and August–September. *Eonycteris spelaea* is threatened by hunting for bushmeat and disturbance from guano collection in southern Cambodia, which increase during the Khmer new year period (April). Improved law enforcement and introduction of sustainable guano harvesting methods would reduce the impact of these activities on bat populations.