

**U.S. Fish and Wildlife Service
Division of International Conservation
Asian Elephant Conservation Fund
FY 2017 Summary of Projects**

In FY 2017, the U.S. Fish and Wildlife Service (USFWS) awarded \$1,835,320 to projects through the Asian Elephant Conservation Fund, which was matched by \$2,737,589 in additional leveraged funds. In total, Congress appropriated \$1,557,000 and additional funds were provided by other sources, as identified below. These funds supported 34 projects in nine countries (in alphabetical order below).

New grants

BHUTAN

ASE1727

Grant # F17AP00319

Examining the attitudes of local people toward elephants in a human-elephant conflict in southern Bhutan. In partnership with Yonten Jamtsho of Bhutan's Ministry of Agriculture and Forests. This project will study the attitudes of local people towards Asian elephants in an area of high human-elephant conflict (HEC) in southern Bhutan, and will help to understand the types and extent of HEC in this region. Project activities include: (1) questionnaire and survey design, planning, development, and pilot testing; (2) a survey of agriculturalists in the conflict zone; (3) a comparison of the number and intensity of HEC events with and without HEC mitigation (electric fences); and (4) providing elephant conservation education and awareness programs to youth and farmers in the conflict area. The results from this study will be used to inform land use planners and conservationists to better plan, design, and implement HEC mitigation actions and ultimately conserve Asian elephants in Bhutan.

USFWS: \$17,610

Leveraged Funds: \$5,820

CAMBODIA

ASE1728

Grant # F17AP00320

Reducing threats to Asian elephants and mitigating human-elephant conflict in the core habitat of the Cardamom Mountain Landscape, Cambodia. In partnership with Fauna and Flora International. The goal of this project is to reduce threats to wild Asian elephants, assist with population recovery in the Cardamom Mountain Landscape of Cambodia, and support communities in mitigating human-elephant conflict (HEC). Project objectives include: (1) reducing demand for wildlife products; (2) supporting the government in the zoning and demarcation of key elephant habitats; and (3) reducing HEC through sustainable mitigation techniques and local management of HEC at key sites. This will be achieved by: (1) developing and implementing a wildlife product demand reduction campaign; (2) working with government

authorities to zone protected areas with a special focus on key elephant habitat and habitat connectivity; (3) supporting government-led HEC response teams to educate and train local stakeholders in conflict mitigation; (4) supporting two primary schools within key elephant habitat to enable local school children to receive an education and build community support for conservation activities; and (5) investigating and pilot-testing innovative and sustainable methods for HEC mitigation and reduction. This project will contribute to the stabilization and long-term growth of the Asian elephant population in Cambodia.

USFWS: \$55,017

Leveraged Funds: \$41,130

ASE1744

Grant # F17AP00329

Direct protection to Asia's last intact elephant corridor, Cambodia. In partnership with Wildlife Alliance. This project endeavors to protect wild Asian elephants in the Southern Cardamom Mountains of Cambodia from poaching, prevent forest fragmentation and encroachment, and preserve continuous forest cover for elephant movement. Project activities include: (1) conducting capacity building and professional development training for forest rangers in order to increase their effectiveness in cases involving high-ranking officials and middlemen involved in wildlife trafficking; (2) providing legal support in court proceedings and legal documentation procedures, and ensuring cases are prosecuted; (3) increasing the effectiveness of intelligence gathering to obtain information leading to wildlife crime networks, including wildlife smuggling rings and logging syndicates; and (4) creating better linkages between remote villages and ranger stations to address land encroachment in the elephant corridor. Through forest and wildlife protection via ranger law enforcement and forest protection this project will contribute to the conservation and survival of wild Asian elephants in Cambodia.

USFWS: \$50,312

Leveraged Funds: \$260,427

ASE1752

Grant # F17AP00332

Elephant conservation and capacity-building in Keo Seima Wildlife Sanctuary, Cambodia: Year 9. In partnership with the Wildlife Conservation Society. The goal of this project is to improve the protection and conservation status of Asian elephants in Keo Seima Wildlife Sanctuary, Cambodia. The main objectives of this project are to improve anti-snare capacity through applied research and a collection incentive program; protect elephants and habitat through targeted law enforcement and anti-snare patrols; and reduce human-elephant conflict through implementation of a community-funded insurance scheme. Project activities include: (1) conducting anti-snare efficacy research to identify maximum return-on-investment strategies; (2) testing and adapting the implementation of snare collection incentives for anti-snare teams; (3) using remote sensing to detect forest loss and encroachment into high-priority elephant areas and inform patrol planning; (4) conducting law enforcement patrols in high-priority areas; (5) reviewing, compiling, and collecting data to inform the design of the insurance scheme; (6) conducting a feasibility assessment of the community-funded insurance scheme in Andong Kralong village; and (7) strengthening the capacity of the Andong Kralong community to implement the insurance scheme.

USFWS: \$59,506

Leveraged Funds: \$66,461

ASE1755**Grant # F17AP00335**

Strengthening control of ivory trafficking in Cambodia; implementing the National Ivory Action Plan, Phase 2. In partnership with the Wildlife Conservation Society. This project builds upon the work undertaken in an earlier project funded by the Asian Elephant Conservation Fund, and aims to provide strategic capacity building and technical support to key law enforcement agencies at international trafficking points to combat trafficking of wildlife, in particular of elephant ivory and rhino horn with the ultimate goal of reducing the trafficking of elephant ivory and rhino horn through Cambodia. Project activities include: (1) conducting training for key law enforcement agencies to intercept and prosecute wildlife trafficking cases at key points in Cambodia; (2) providing technical support to the sampling and inventory of ivory and rhino horns that are seized by law enforcement agencies; (3) establishing a secure repository for confiscated wildlife products; and (4) providing technical support and recommendations to the national Management Authority for the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This project will raise awareness and strengthen capacity within primary law enforcement agencies to combat wildlife trafficking in Cambodia. USFWS: \$49,948¹ Leveraged Funds: \$52,777

INDIA**ASE1719****Grant # F17AP00314**

Augmenting the capacity of the West Bengal Forest Directorate to address human-elephant conflict in southwest West Bengal, India. In partnership with World Wildlife Fund - India. The goal of this project is to reduce human-elephant conflict (HEC) and support the conservation of Asian elephants in West Bengal, India by working with the forestry authorities to develop and implement sustainable management measures. In collaboration with forestry authorities of West Bengal, the grantee will work to better understand the context for HEC in in the southwest region of West Bengal and strengthen the capacity of the forestry authorities to manage elephant conservation. Broad project objectives are: (1) facilitating strategic decision-making among the three divisions in southwest West Bengal with detailed information on landscape-level elephant movement and barriers to that movement; (2) implementing best practices to minimize HEC through community participation; and (3) conduct awareness-raising campaigns and targeted visits to reduce HEC and increase appreciation for elephants at a local level. Project activities include: (1) identifying causal factors of HEC; (2) documenting and mapping villages and physical barriers to elephant movement; (3) developing a strategy and maintenance plan to address these landscape-level barriers; (4) conducting stakeholder analysis to understand the knowledge, attitudes, and practices towards elephants and HEC mitigation in ten priority communities; (5) developing model villages for HEC mitigation; (6) establishing and training three voluntary HEC response units of 15 skilled individuals each; (7) conducting education campaigns including meetings, film screenings, street plays, posters, and road signs; and (7) arranging for frontline staff, mahouts, and response unit members to visit an established HEC mitigation site in Assam.

USFWS: \$56,270

Leveraged Funds: \$54,036

¹ Of this, \$29,580 is funded by USAID-CWT funds.

ASE1723**Grant # F17AP00315**

Strengthening protection machinery for Asian elephant conservation through research and community edge in Dehing Patkai Elephant Reserve, Assam, India. In partnership with Aaranyak. This project continues the work undertaken in a previous project supported through the Asian Elephant Conservation Fund, and focuses on wild Asian elephant conservation in the Dehing Patkai Elephant Reserve of Assam, India, a transboundary landscape and a hotspot of human-elephant conflict (HEC). This project will continue to collect dung DNA samples for elephant population estimates and assist the Forest Department in gazetting the landscape as a National Park. Project activities include: (1) estimating the elephant population in the Reserve via dung count methods; (2) conducting surveys of local communities to determine their dependency on elephant corridors; (3) constructing elephant conservation sign boards in the corridor; (4) training at least 200 frontline Forest Department staff on GPS-based elephant monitoring, including leading a study tour to Kaziranga National Park; (5) providing field gear, including shoes and rain gear, to 200 field staff; (6) conducting awareness programs on human-elephant coexistence to local communities and schools, including providing teacher trainings; (7) training 50 local youths on ecotourism as an alternative livelihood; (8) cultivating crops that are unpalatable to elephants, such as citrus and chilies; (9) supporting local bilateral meetings between Assam and Arunachal Pradesh Forest Departments to improve inter-state cooperation on elephant conservation; and (10) initiating dialogue with Myanmar wildlife authorities and Assam and Arunachal Pradesh Forest Departments to propose the idea of transboundary elephant conservation collaborations. This project will contribute to the long-term protection and survival of Asian elephants and their habitats in Assam via research, capacity building of Forest Department staff, mitigation of HEC and continual involvement of local communities.

USFWS: \$55,730

Leveraged Funds: \$4,300

ASE1726**Grant # F17AP00317**

Conservation of Asian elephants in the riverine areas of Dibrugarh, Sibsagar and Jorhat districts of Eastern Assam, India. In partnership with Aaranyak. The purpose of this project is to conserve wild Asian elephants by addressing human-elephant conflict (HEC) in the riverine areas along the Brahmaputra River in Dibrugarh, Sibsagar and Jorhat Districts of eastern Assam, India in collaboration with local communities. The major objectives of this project are to investigate the abundance and distribution patterns of elephants in this region, assess the extent of HEC, test low-cost HEC mitigation techniques, and conduct capacity building exercises for both the local community and Forest Department staff. Project activities include: (1) conducting a single-season presence-absence survey of elephants using line transects; (2) collecting data on HEC events including crop raiding, property damage, and human and elephant injury and death; (3) mapping HEC zones using GIS tools; (4) cultivating crops unpalatable to elephants, such as lemon and lemongrass; (5) cultivating elephant forage species in communal village land, including the development of a nursery with the capacity to raise 80,000 seedlings; (6) testing HEC mitigation approaches such as lights and firecrackers; (7) providing gear to Forest Department anti-depredation squads including boots, jackets, rain gear, and first aid kits; and (8) conducting awareness-raising programs targeting local communities and schools. This project will contribute to the conservation of Asian elephants in the eastern region of Assam by

increasing our understanding of elephant usage of the landscape, mitigation of HEC, and increasing the local community's understanding of elephant conservation issues.

USFWS: \$51,960

Leveraged Funds: \$20,850

ASE1733

Grant # F17AP00323

Mitigating human–elephant conflict to strengthen a network of elephant-friendly tea plantations in a critical elephant landscape in northeast India. In partnership with the Centre for Wildlife Studies. The goal of this project is to have a thriving population of wild Asian elephants in a low-threat environment within the Kaziranga-Karbi Anglong Elephant Reserve of Assam, India. Project objectives will address concerns for human safety resulting from elephants' use of tea plantations, while simultaneously enhancing support for elephant conservation through the implementation of human-elephant conflict (HEC) mitigation activities, an individual elephant identification system and outreach and education campaigns. Project activities include: (1) conducting stakeholder meetings with tea plantation staff to develop and initiate early-warning systems and other HEC mitigation strategies; (2) training locals to identify and collect data on elephants; (3) tailoring HEC mitigation efforts to the specific behaviors of individual elephants in collaboration with plantation staff; and (4) cultivating positive attitudes of local people towards elephant conservation through awareness-raising activities. This project will expand support for elephant conservation in the Reserve and strengthen the network of elephant-friendly tea plantations in Assam, such that these plantations can serve as secondary habitat, movement corridors, and refuges for elephants during floods.

USFWS: \$59,900

Leveraged Funds: \$60,900

ASE1734

Grant # F17AP00324

Securing the globally critical Asian elephant population in Nagarahole-Bandipur National Parks, India, through habitat consolidation and threat mitigation. In partnership with the Centre for Wildlife Studies. The goal of this project is to ensure that the wild Asian elephant metapopulation in the Mysore Elephant Reserve (MER) is healthy and free of pressures that threaten its persistence in the Western Ghats, India. Securing key source populations of elephants and consolidating habitat is critical to protecting this population, and will be addressed via support of voluntary resettlement of villages within key elephant habitat and intelligence-gathering on wildlife crimes. Project activities include: (1) confidence-building measures to motivate families to relocate outside of the MER, increasing political and public support for voluntary resettlement; (2) provision of support to families who wish to relocate, including liaising with appropriate government departments; (3) carrying out land-use classification of the MER using GIS tools and ground-truthing to prioritize sites for strategic land purchases; and (4) gathering and verifying information using an intelligence network to minimize threats to elephants and their habitats. The project will directly contribute to securing habitat within MER by reducing human-elephant conflict and minimizing threats from illegal activities such as ivory poaching and timber smuggling in the Western Ghats of India.

USFWS: \$59,900

Leveraged Funds: \$60,750

ASE1741**Grant # F17AP00327**

The Odisha Elephant Landscape Project, India. In partnership with Elephant Family. The Odisha Elephant Landscape Project aims to protect wild Asian elephants and their habitats and mitigate human-elephant conflict (HEC) and intentional illegal killings of elephants in Odisha, India by supporting the Odisha Forest Department through elephant monitoring, development of threat maps, identification of open wells, monitoring poachers, and facilitating crop compensation claims after HEC events. Project activities include: (1) supporting local forest protection groups to prevent poaching, reduce HEC, and raise awareness among local communities and school children; (2) monitoring and providing information to the Forest Department about poacher movements and threats to elephants, such as illegal development, open wells, low power lines, electric traps, and illegal or defunct electric fences; (3) monitoring known elephant corridors for illegal activities such as mining, quarrying, dumping, and polluting; (4) providing recommendations to the forest authorities on habitat protection and HEC compensation methods using satellite mapping; (5) facilitating crop damage claims for farmers from the Forest Department; (6) ensuring an effective forest fire response by the Forest Department by monitoring and reporting fires quickly; (7) creating pilot nurseries of bauhinia vines for use as alternative livelihood and elephant fodder plants; and (8) informing the media to generate positive news stories in support of elephant conservation and to raise awareness about threats to elephants. This multifaceted project will support the Forest Department in reducing threats to Asian elephants, enrich elephant habitat, support alternative livelihoods in Odisha, and increase awareness and understanding in local communities and media.

USFWS: \$72,441

Leveraged Funds: \$41,408

INDONESIA**ASE1713****Grant # F17AP00310**

Securing a future for Sumatran elephants at Harapan Rainforest, Sumatra, Indonesia (Phase II). In partnership with the Australian Orangutan Project. This project continues to support conservation objectives and site-specific needs identified for the conservation of Critically Endangered Sumatran elephants in the Harapan rainforest, Sumatra, Indonesia, building upon previous funding from the Asian Elephant Conservation Fund. The overall goal of the project is the protection of Harapan's small founder population of wild Asian elephants and the mitigation of human-elephant conflict (HEC) in this rainforest through community-based conflict mitigation (CBCM) and elephant protection by specially trained rangers, supported by satellite and radio telemetry with the ultimate goal of a viable elephant population thriving within the designated Conservation Zone at Harapan rainforest. Project activities include: (1) in-house training of Elephant Conservation Unit rangers; (2) monitoring and safeguarding of resident elephants using GPS/VHF collars and direct tracking; (3) re-capturing and re-collaring elephants; (4) monitoring and mitigating HEC via CBCM; (5) establishing an information network and early-warning system; and (5) supporting elephant translocations as needed. This project will contribute to the survival of the Sumatran elephant by protecting the resident elephants of the Harapan rainforest from poaching and conflict and safeguarding their habitat in Sumatra, Indonesia.

USFWS: \$48,631

Leveraged Funds: \$21,220

ASE1716**Grant # F17AP00311**

Continuing the development of elephant and wildlife veterinary teaching, training and research capacities and running a wildlife ambulance at Syiah Kuala University, Banda Aceh, Sumatra, Indonesia. In partnership with the Australian Orangutan Project. The primary goal of this project is to continue to develop and conduct regular, high-quality elephant and wildlife veterinary teaching and training and upgrade veterinary capacities at Syiah Kuala University to provide qualified veterinary services for all wildlife conservation programs in Banda Aceh, Sumatra, Indonesia. The main objectives of this project are to support teaching elephant medicine via regular lectures, seminars, and field work, and operating the elephant ambulance for veterinary needs for both wild elephants and captive elephants used in conservation programs. Specific project activities include: (1) conducting lectures, courses, and seminars for wildlife veterinarians and students; (2) providing emergency response for treatment and rescue of wild elephants; (3) serving as an on-call service to conduct post mortems upon request; (4) providing backup veterinary services for elephant translocations, fitting radio collars, and supporting research as needed; (5) arranging regular visits to elephant patrol units in Lampung North Sumatra and Aceh; (6) providing an on-call emergency response to all elephant patrol units in Sumatra; and (7) developing elephant research programs at the veterinary faculty. Qualified veterinary expertise is crucial to the success of elephant conservation activities throughout Sumatra and is required for emergency response for injured wild elephants, human-elephant conflict situations, and for regular routine care of captive elephants employed in conservation patrol units in Sumatra, Indonesia.

USFWS: \$55,000

Leveraged Funds: \$149,380

ASE1732**Grant # F17AP00322**

Managing elephants in Aceh, Indonesia: Developing capacity to estimate elephant abundance and mitigating human-elephant conflict. In partnership with Fauna and Flora International. The purpose of this project is to ensure the survival and increase the population of the Critically Endangered Sumatran elephant through a comprehensive elephant management strategy that protects the integrity of habitat and benefits rural communities of Ulu Masen, Sumatra, Indonesia. The main objectives of this project are to obtain accurate data on Sumatran elephant populations in Aceh province using a capture-recapture methodology and to mitigate human-elephant conflict (HEC) in target communities. Project activities include: (1) providing a four-day training on DNA collection for 15 trainees; (2) fecal DNA sampling with at least 200 samples collected; (3) conducting laboratory DNA amplification and analysis at Syiah Kuala University (*Universitas Syiah Kuala, or Unsyiah*); (4) mitigating HEC through Conservation Response Units; and (5) conducting monthly Spatial Monitoring and Reporting Tool (SMART) patrols by two four-person ranger teams. This work will contribute to the conservation of Sumatran elephants in Aceh, Indonesia through systematic monitoring of elephant populations and their habitat.

USFWS: \$66,510

Leveraged Funds: \$50,175

ASE1736**Grant # F17AP00325**

Community-based human-elephant conflict mitigation and protection of Sumatran elephant populations and habitat through Elephant Response Units in Way Kambas, Lampung, Indonesia. In partnership with the Community for Sumatra Nature Conservation. The goal of this project is to continue to mitigate human-elephant conflict (HEC) and its impact on local communities surrounding Way Kambas National Park, Sumatra, Indonesia through the use of Elephant Response Units (ERU). Project activities include: (1) ERU habitat patrols and elephant monitoring; (2) immediate response by ERUs to HEC events; (3) assisting 22 local communities in HEC mitigation capacity building; (4) maintaining communication between local communities and ERU teams for rapid HEC response; (5) organizing open meetings between authorities and local communities; (6) assisting communities with night crop-guarding through construction of five observation towers and by equipping five villagers with gear to serve as community scouts to lead crop guarding activities and involve community members in ERU activities; and (7) sharing information between local authorities, non-governmental organizations, other conservation stakeholders, and ERUs. This project will contribute to the sustainable conservation of the Critically Endangered Sumatran elephants and their habitat in Sumatra, Indonesia.

USFWS: \$55,015²

Leveraged Funds: \$245,358

ASE1738**Grant # F17AP00326**

Protecting the Sumatran elephant population in Beutong Region, the Leuser Ecosystem, Aceh, Indonesia. In partnership with *Forum Konservasi Leuser*. This award supports a comprehensive program to protect the Critically Endangered Sumatran elephant in the Beutong region in the northwest Leuser ecosystem, Aceh, Sumatra, Indonesia, by significantly reducing human-elephant conflict (HEC), monitoring wild elephant populations, conducting anti-poaching patrols, and providing community outreach. Project activities include: (1) recruiting and training two wildlife project teams, including one forest police officer each; (2) equipping teams with rations, fuel, and basic patrol gear such as tents, GPS units, cameras, and uniforms; (3) mobilizing patrol teams with each team patrolling for a minimum of 15 days per month; (4) reporting all wildlife crimes and violations to District police; and (5) entering Spatial Monitoring and Reporting Tool (SMART)-based patrol data entry and synthesizing data with SMART reports submitted to the Aceh government and forest authorities. This project is an important first step in protecting the Beuton subpopulation of Sumatran elephants by reducing poaching and electrocution and poisoning deaths of elephants, and increased community awareness of elephant conservation issues in the Leuser ecosystem of Aceh, Indonesia.

USFWS: \$49,960

Leveraged Funds: \$28,300

ASE1753**Grant # F17AP00333**

Saving the Sumatran elephant through supporting resort-based management in Way Kambas National Park, Indonesia to reduce human-elephant conflicts and prevent poaching. In partnership with the Wildlife Conservation Society. The goal of this project is to continue the work started with previous funding through the Asian Elephant Conservation Fund to assist

² Of this, \$5,015 is funded by proceeds from sales of the Save Vanishing Species stamp.

Indonesian authorities in the ongoing improvement in managing Way Kambas National Park (WKNP) in order to maintain secure habitat for Critically Endangered Sumatran elephants and assist communities outside of the Park to peacefully coexist with wild elephants. Objectives will focus on support of existing management efforts through patrols and support to law enforcement by fully integrating Spatial Monitoring and Reporting Tool (SMART) patrol methodology into WKNP management to reduce forest encroachment, investigating and prosecuting wildlife traders, and reducing human-elephant conflict (HEC) around the Park's forest edge. Specific activities include: (1) providing advanced training for SMART patrol teams and data technicians; (2) conducting forest patrols and monthly SMART strategy evaluations and adaptive patrol management; (3) managing a local informant network; (4) conducting investigations to identify poaching syndicates and traders, bring cases to Indonesian law enforcement authorities, and assist law enforcement operations; (5) providing legal assistance to law enforcement agencies; (6) supporting District government in HEC mitigation; (7) conducting community-based patrols and rapid responses to HEC events; (8) evaluating the effectiveness of HEC intervention efforts; and (9) contributing to the development and evaluation of the implementation of the National Elephant Conservation Strategy of Indonesia.

USFWS: \$52,937³

Leveraged Funds: \$56,529

ASE1754

Grant # F17AP00334

Saving the Sumatran elephant through supporting resort-based management in Gunung Leuser National Park, Indonesia to reduce encroachment and prevent poaching. In partnership with the Wildlife Conservation Society. The goal of this project is to assist Indonesian authorities in improving the management of Gunung Leuser National Park (GLNP), Sumatra, Indonesia to protect Critically Endangered Sumatran elephants and other wildlife. Objectives focus on the prevention of threats and protection of habitat and elephants through patrols and direct monitoring in alignment with National Park management priorities. Project activities include: (1) strengthening GLNP management through the integration of Spatial Monitoring and Reporting Tool (SMART) into forest patrols to reduce forest encroachment and other threats in areas with key elephant populations; (2) supporting government law enforcement agencies to prosecute forest crimes detected by SMART-based patrols; and (3) combating illegal trade in elephant parts by investigating and prosecuting wildlife traffickers. This project will address the three main threats to wild elephants in GLNP - poaching and illegal wildlife trade, HEC, and deforestation - and contribute to the conservation of wild elephants in Sumatra, Indonesia.

USFWS: \$58,003⁴

Leveraged Funds: \$63,462

³ Funded by USAID-CWT funds.

⁴ Funded by USAID-CWT funds.

MYANMAR

ASE1750

Grant # F17AP00331

Long-term protection and monitoring of the Rakhine Yoma Elephant Range, Myanmar. In partnership with the Wildlife Conservation Society. This project aims to maintain and enhance the protection of wild Asian elephants in the Rakhine Yoma Elephant Range (RYER) in Myanmar through continued engagement with Elephant Protection Units (EPUs) and provision of training, support, and patrol gear to improve patrol performance and morale. Project activities include: (1) increasing the operational effectiveness of existing EPUs and expanding coverage by hiring additional captive elephants from the Myanma Timber Enterprise; (2) upgrading ranger substations and provisions of boats; (3) increasing effectiveness of patrols through an adaptive Spatial Monitoring and Reporting Tool (SMART) patrol methodology; (4) identifying elephant distribution and hotspots; and (5) conducting regular analysis of satellite imagery to monitor and respond to forest encroachment and shifting cultivation within the RYER. This project will maintain and enhance the protection of wild elephants and other wildlife of the RYER through the use of SMART-managed patrolling and development of staff capacity to allow government and local staff to more effectively carry out their duties.

USFWS: \$59,480⁵

Leveraged Funds: \$186,158

NEPAL

ASE1706

Grant # F17AP00305

Application of a molecular method to understand and manage human-elephant conflict in Parsa-Chitwan Complex, Nepal. In partnership with the National Trust for Nature Conservation, Nepal. The purpose of this project is to study the behavior and genetics of wild Asian elephants in the Chitwan-Parsa National Park complex of Nepal to better understand the drivers of conflict behavior in elephants and the overall population structure of this subpopulation in Nepal. Specific project activities include: (1) conducting a population survey using genetic techniques; (2) using dung samples to perform tests on stress hormone levels in elephants; (3) extracting genetic material for DNA-based profiles of individual elephants; (4) establishing and training a rapid response team for human-elephant conflict events; (5) conducting three visits for residents from villages experiencing high HEC to key protected areas for elephants to raise awareness and increase tolerance of elephants. This project will produce reports on the population status and structure of Asian elephants in the Chitwan-Parsa complex, contribute to a better understanding of stress on elephant conflict behavior, build a DNA-profile database of the existing elephant population, create a well-equipped HEC rapid response team, and increase the tolerance of local inhabitants to elephants, thereby contributing to the conservation of wild Asian elephants in Nepal.

USFWS: \$52,602

Leveraged Funds: \$16,950

⁵ Funded by USAID-CWT funds.

ASE1707**Grant # F17AP00306**

Human-elephant coexistence in Koshi Tappu Wildlife Reserve, Eastern Nepal. In partnership with the National Trust for Nature Conservation, Nepal. This project, developed in collaboration with local communities and the Koshi Tappu Wildlife Reserve (KTWR) located in the eastern Terai landscape of Nepal, aims to initiate conservation activities to ensure the long-term survival of wild Asian elephants and their coexistence with humans in this region. Project objectives include monitoring of Asian elephants, reduction of human-elephant conflict (HEC), outreach and education centered on elephant conservation and HEC, and promotion of alternative livelihoods in HEC-prone areas. Specific project activities include: (1) collection and analysis of dung DNA to estimate the elephant population size in KTWR; (2) formation and training of a community-based HEC response team including two members from each of 14 Buffer Zone Community Forest (BZCF) groups; (3) monitoring wild elephants and collection of HEC data by the community-based team; (4) promotion of alternative livelihoods such as fish farming to HEC-affected and marginalized groups; (5) developing and conducting an awareness program via local media including radio, street dramas, sign boards, and other educational materials; and (6) providing human-elephant coexistence (HECx) training to 14 BZCF groups with 35 participants per training; (7) conducting HECx training for 10 local journalists, 40 army personnel, local grade 9-10 students; and (8) arranging an exposure visit for the community-based response team and KTWR staff to Chitwan and Bardia National Parks to observe successful HEC mitigation measures employed. This project will contribute to the long-term survival and conservation of wild Asian elephants in Nepal by addressing the relatively new and increasing problem of HEC in the Eastern Nepal landscape.

USFWS: \$59,987

Leveraged Funds: \$34,199

ASE1708**Grant # F17AP00307**

Upscaling women-focused conservation education and outreach programs to promote human-elephant coexistence in the Western Terai Landscape, Nepal. In partnership with the Tharu Women Upliftment Centre. The purpose of this project is to promote human-elephant coexistence (HECx) in the western Terai landscape of Nepal, focusing on education and behavior change in women, specifically households situated in the Laljhadi and Khata forest corridors where human-elephant conflict (HEC) rates are very high. Specific project activities include: (1) provision of HECx refresher training to 20 local trainers; (2) 25 subsequent village HECx trainings provided by the local HECx trainers and facilitators; (3) 20 visits by community leaders and local farmers (with a focus on women) to Bardia and Suklaphanta National Parks to observe wildlife and participate in nature interpretation activities; (4) production and broadcast of 40 episodes of an HECx radio program in Nepali and Tharu languages; and (5) support and training of rapid response teams to respond to HEC events, including provision of gear, rations, transportation, and communications. This project was developed in collaboration with the Department of National Parks and Wildlife Conservation of Nepal, Bardia National Park, and Suklaphanta Wildlife Reserve, and Community Forest User Groups to scale-up conservation education and HECx activities in this high-HEC area, which is home to over two million people and is the primary remaining landscape for wild Asian elephants in Nepal.

USFWS: \$50,405

Leveraged Funds: \$19,775

ASE1712**Grant # F17AP00309**

Community stewardship for human-elephant coexistence at Bardia National Park, Nepal. In partnership with the National Trust for Nature Conservation, Nepal. This project continues the human-elephant conflict (HEC) mitigation work initiated in Bardia National Park, Nepal under previous funding from the Asian Elephant Conservation Fund. The overall goal of the project is to develop community stewardship for human-elephant coexistence (HECx) by diversifying livelihood opportunities, strengthening use of HEC mitigation tools such as electric fences and street lights, establishing a value chain approach for cash crops unpalatable to elephants, and launching community outreach programs in the eastern sector of the Park to increase the tolerance of local communities for wild elephants. Specific project activities include: (1) tourism homestay workshop, training, and promotion in HEC-prone areas; (2) electric fencing and street light provisioning; (3) procurement and training of elephant immobilization equipment to wildlife technicians and providing mobility support to HEC rapid response teams; (4) conducting a scoping study of firewood species and production of seedlings and plantations; (5) provision of seed money for two agricultural cooperatives in unpalatable crops and business training for farmers; (6) agricultural extension for essential oil crops unpalatable to elephants, such as mentha, chamomile, and lemongrass; (7) conservation education classes at community schools; and (8) conducting a workshop with journalists to raise awareness by broadcasting elephant conservation stories. This project contributes to the conservation of wild Asian elephants by supporting and educating local communities sharing the landscape with wild elephants in the Terai region of Nepal.

USFWS: \$56,660

Leveraged Funds: \$48,675

ASE1724**Grant # F17AP00316**

Prevention and mitigation of conflict between humans and pachyderms in Nepal through outreach programs. In partnership with the Zoo Outreach Organization. The goal of this project is to reduce human-elephant conflict (HEC) in Nepal through training of trainers in landscapes where humans and wild Asian elephants coexist, targeting educators and local communities. Project activities include: (1) identifying and training at least 120 educators in effective preventative and practical human-elephant coexistence techniques in three training workshops; (2) disseminating educational materials for multiple-age groups and literacy levels; (3) employing recently trained educators to conduct 15 awareness programs for students and communities in high HEC areas; and (4) evaluating the impacts of the program through personal interviews, online discussion groups, and by inviting trainees to join an Educator Network. This project will contribute to the conservation of Asian elephants in Nepal by reducing HEC through facilitating attitudinal changes among residents of this region.

USFWS: \$65,550

Leveraged Funds: \$15,300

SRI LANKA**ASE1711****Grant # F17AP00308**

Population status and management of Asian elephants in South-Sri Lankan protected area complexes. In partnership with the Elephant Forest & Environment Conservation Trust. This

project will consist of three primary program areas focused on the conservation of wild Asian elephants in Sri Lanka. The three goals of this project are to: (1) monitor the long-term health of the elephant population in and around Uda Walawe National Park; (2) demonstrate the value and feasibility of scientifically rigorous survey techniques by calibrating vehicle- and foot-transect survey methodologies; and (3) assist the Department of Wildlife Conservation (DWC) in the implementation of Spatial Monitoring and Reporting Tool (SMART) software as a tool for protected area management and law enforcement. The project aims to achieve these goals by: (1) conducting baseline monitoring of elephants in Uda Walawe and Lunugamwehera National Parks, tracking births, deaths, and updating photographic identification records; (2) assessing indicators of the health of elephant populations subject to recent local elephant drives; (3) evaluating the efficacy of re-routing electric fences to mitigate human-elephant conflicts; (4) quantifying population dynamics of elephant bulls occupying Uda Walawe National Park via photo identification and estimating the percentage of bulls involved in crop-raiding; (5) working with the DWC to design surveys and determine priority areas for which data are needed, and train DWC personnel in line-transect survey methodology; (6) estimating the elephant population size in and around Uda Walawe National Park with vehicle-based surveys; (7) estimating the elephant population in and around Uda Walawe National Park under a distance sampling framework in parallel with photographic surveys; (8) training DWC personnel and collaborators to use and manage SMART software; (9) establishing standard operating procedures and guidelines for SMART patrols; and (10) providing technical support and advice to DWC as they pilot SMART patrols in five protected areas.

USFWS: \$65,483

Leveraged Funds: \$147,610

Modifications to existing grants

INDIA

ASE1506

Grant # F15AP00335

Landscape genetics of three Asian elephant populations in the Western Ghats, India. In partnership with Pondicherry University. This modification provides additional funding and time to this project in order to complete the DNA analysis of an additional 600 samples. The additional analyses will bring the total individual Asian elephant genotypes to 765 in three ranges in the Western Ghats of India. This will allow for a complete population genetics analysis and landscape genetics modeling of the three major Asian elephant populations in the southern Western Ghats.

USFWS: \$54,900⁶

Leveraged Funds: \$0

⁶ Of this, \$26,100 is funded by proceeds from sales of the Save Vanishing Species stamp.

INDONESIA

ASE1504

Grant # F15AP00499

Way Kambas National Park pilot project for habitat regeneration, fire protection, and elephant conflict mitigation in Sumatra, Indonesia. In partnership with *Yayasan Orangutan Sumatera Lestari*. This modification provides additional funds to purchase a second set of fire-fighting equipment and fund a second team of fire fighters to support and protect the regeneration project site in Way Kambas National Park, Sumatra, Indonesia, where fires threaten to occur on a double front.

USFWS: \$11,750⁷

Leveraged Funds: \$3,000

ASE1604

Grant # F16AP00320

Conservation and monitoring of Sumatran elephants in Bukit Tigapuluh, Indonesia. In partnership with the Frankfurt Zoological Society. The purpose of this project is to support and supervise community-based conflict mitigation in order to reduce loss and damages to farmers and retaliatory actions towards Critically Endangered Sumatran elephants, and to monitor movements of and threats to the resident elephant population of Bukit Tigapuluh, Sumatra, Indonesia. Project activities include: (1) in-house training of elephant conservation and conflict mitigation unit teams; (2) monitoring and tracking GPS-collared elephants and their family groups to safeguard them from poaching and poisoning; (3) re-capturing collared elephants to replace non-active collars; (4) monitoring and assessing damages from human-elephant conflict (HEC) incidents; and (5) further strengthening the existing early-warning HEC system by working closely with village leaders and authorities to provide emergency hotline accessibility and ensure quick response of ranger teams. This project will contribute to the peaceful coexistence of people and Sumatran elephants in one of the largest remaining lowland forests in Sumatra.

USFWS: \$48,000

Leveraged Funds: \$196,000

ASE1654

Grant # F16AP00341

Saving the Sumatran elephant through supporting resort-based management in Bukit Barisan Selatan National Park, Indonesia to reduce encroachment and prevent poaching. In partnership with the Wildlife Conservation Society. The purpose of this project is to assist Indonesian authorities to manage and reduce encroachment of Bukit Barisan Selatan National Park, Sumatra, Indonesia in order to maintain habitat for the Critically Endangered Sumatran elephant and other wildlife. The objectives will focus on the prevention of threats and protection of habitat and elephants through patrols and direct monitoring in the field. Specific project activities include: (1) use of Spatial Monitoring and Reporting Tool (SMART) data to identify key elephant areas susceptible to encroachment and human-elephant conflict; (2) increased patrols in National Park areas threatened with active encroachment; (3) support to national park and law enforcement agencies for encroachment prosecutions; and (4) operation of Wildlife Crime Units to investigate and support government law enforcement agencies to arrest and

⁷ Of this, \$2,415 is funded by proceeds from sales of the Save Vanishing Species stamp.

prosecute wildlife traders. This project will contribute to the long-term conservation of Sumatran elephants and other wildlife by assisting Indonesian authorities in improving management and combating the illegal wildlife trade in Bukit Barisan Selatan National Park, Sumatra, Indonesia. USFWS: \$59,832⁸ Leveraged Funds: \$183,646

MYANMAR

ASE1549

Grant # F15AP00331

Educating local people to save Myanmar's conflict elephants. In partnership with Compass Films. This financial modification and project extension will build on the existing and ongoing public awareness-raising campaign and the activities of existing community outreach teams, to address an emerging Asian elephant poaching crisis in Myanmar. The outreach campaign will expand the purview of the existing H.EL.P. (Human Elephant Peace) initiative. The campaign will continue to target local villagers who live near elephant habitat for direct action and the wider public to leverage political influence to increase enforcement of poaching crimes. An anti-poaching public awareness-raising campaign will be produced using professionally-shot videos and printed educational materials. New anti-poaching content will be integrated into the existing H.EL.P. booklet and DVD, which will be extended by several additional double-page spreads on poaching. The video campaign will enroll the help of national Myanmar celebrities and will be broadcast daily in the form of a 30-part public awareness-raising series on National Myanmar television (MITV, MRTV, and Skynet). Two information officers will be hired and trained and embedded into the existing community outreach teams in order to collect detailed information about poaching activities by: (1) building trust and soliciting information from affected communities; (2) developing relationships with local elephant experts (e.g. mahouts, forest rangers, village leaders) to better understand poaching incidents; (3) collecting systematic data and samples when elephant carcasses are found (e.g. GPS, sex, age, killing method, parts removed); and (4) developing a relationship with law enforcement and national government agencies to provide real-time information to decision-makers.

USFWS: \$46,610⁹

Leveraged Funds: \$59,325

THAILAND

ASE1650

Grant # M-F16AP00339

Elephant conservation and education campaigns in the Western Forest Complex and capacity strengthening of future protected area managers, Thailand Year 8-10. In partnership with the Wildlife Conservation Society. The purpose of this project is to maintain the Thai Smart patrol system in Thung Yai West Wildlife Sanctuary (TYW) at its current intensity and coverage, to build a volunteer network in Huai Kha Khaeng (HKK) from existing volunteer groups and conservation clubs, and to train undergraduate wildlife students from Kasetsart University on Spatial Monitoring and Reporting Tool (SMART) patrol and wildlife monitoring techniques in HKK. Project activities include: (1) conducting follow-up monitoring with 18 patrol teams in

⁸ Funded by USAID-CWT funds.

⁹ Funded by proceeds from sales of the Save Vanishing Species stamp.

TYW by providing technical support, refresher training, equipment, and patrol rations; (2) entry, review, and analysis of patrol data in the SMART database; (3) preparing and disseminating monthly SMART reports; and (4) building a volunteer network by selecting a group of 40 volunteers, including local school teachers, non-governmental organization representatives, and Thai university students to participate in a five-day wildlife conservation workshop at HKK; (5) training 30 undergraduate students to receive 20 days of training on SMART patrol and monitoring techniques in HKK. This project will contribute to the protection and increase of the wild population of Asian elephants in Thailand's Western Forest Complex, a UNESCO Natural World Heritage Site.

USFWS: \$59,907

Leveraged Funds: \$61,127

ASE1652

Grant # M-F16AP00340

Law enforcement monitoring and human-elephant conflict mitigation in Kaeng Krachan National Park, Thailand, Year 12-14. In partnership with the Wildlife Conservation Society. The purpose of this project is to secure the long-term conservation of the wild Asian elephant population and its habitat in Kaeng Krachan National Park (KKNP) by increasing the effectiveness of protection efforts and reducing human-elephant conflict (HEC) in the region. Project activities include: (1) providing refresher training of KKNP staff in law enforcement and monitoring methods, Spatial Monitoring and Reporting Tool (SMART) on-the-job training, and law enforcement monitoring data analysis and report writing; (2) reducing HEC by promoting and monitoring standard HEC mitigation methods in local and a 400m extension of the semi-permanent fence in Huai Sad Yai; and (3) expansion of elephant conservation education targeting villagers from sites of high HEC to cover the whole of KKNP, an annual HEC and mitigation workshop in communities, and an education campaign for tourists. This project will lead to more effective patrolling and law enforcement activities in the Park; better provisioned, trained, and motivated staff capable of addressing the threat of elephant poaching gangs; and reduced retaliatory elephant deaths in Thailand.

USFWS: \$59,994¹⁰

Leveraged Funds: \$269,969

¹⁰ Of this, \$29,013 is funded by proceeds from sales of the Save Vanishing Species stamp.