U.S. Fish and Wildlife Service Division of International Conservation Asian Elephant Conservation Fund FY 2016 Summary of Projects

In FY 2016, the U.S. Fish and Wildlife Service (USFWS) awarded \$1,457,000 from Congressional appropriations to projects through the Asian Elephant Conservation Fund. An additional \$189,121 was provided by other sources identified below. Total support amounted to \$1,746,121, which was matched by \$2,188,629 in leveraged funds. These funds supported 32 projects in eight countries (in alphabetical order below).

Grants

CAMBODIA

ASE1602

Grant # F16AP01089

Asian elephant conservation education through the Kouprey Express. In partnership with the Wildlife Alliance. The purpose of this project is to continue to fund the only environmental education team in Cambodia, and bring the plight of the Asian elephant and ivory trade to the Cambodian public. The project has expanded its reach and scope through a Memorandum of Understanding with the Government of Cambodia to include national schools and communities in Phnom Penh and Preah Sihanouk, home to Cambodia's largest port. The Kouprey Express Environmental Education Program consists of a curriculum that builds the capacities of students and teachers through a national awareness campaign that highlights poaching; wildlife trade; and habitat loss, degradation, and fragmentation. A strong anti-ivory message aims to reduce local and regional demand and complicity in the transport of ivory into, through, and out of Cambodia. Specific project activities include: (1) delivery of education curriculum to rural schools in the Cardamom Mountains, Kompong Som, and Phnom Penh, focusing on threats to flagship species; (2) improving the understanding of key environmental issues among teachers, community educators, and leaders through training, staff development, monitoring and evaluation, and by providing multiple-use, long-lasting educational materials; (3) conducting field trips to Phnom Tamao Wildlife Rescue Center for students and community members; (4) hosting 15+ interactive Community Night Shows; (5) conducting anti-ivory and wildlife identification trainings with Customs and Excise officers at primary points of entry; (6) raising awareness about the devastating effects of the illegal wildlife trade with focus on elephants and ivory through community outreach programs, installation of billboards, and by posting hotline stickers on 10 tuk-tuks in Phnom Penh to promote the Wildlife Alliance's 24-hour nationwide wildlife crime hotline. This project's on-the-ground elephant protection, anti-ivory campaign, and education and community outreach program combined with the recipient's on-going work in wildlife crime law enforcement will help curb the tide of ivory transiting through Cambodia and support the authorities charged with protecting Cambodia's wildlife.

USFWS: \$83,746 Leveraged Funds: \$264,971

ASE1623

Grant # F16AP00330

Direct protection to Asia's last intact elephant corridor, Cambodia. In partnership with the Wildlife Alliance. The Southern Cardamom Forest Protection Program (SCFPP), supported by the Wildlife Alliance, implements a direct, holistic approach to forest protection in Cambodia, providing ranger patrols which protect wild Asian elephants and their habitats from poaching and land encroachment in this landscape. This project will protect Asian elephants by (1) improving ranger effectiveness through training; (2) strengthening good governance by building strong cases and following up with the courts on active cases; (3) providing investigative skill development training; and (4) creating better linkages between remote villages and ranger stations to address land encroachment. SCFPP rangers will conduct daily forest patrols to effectively resolve human-elephant conflicts, operate ranger stations, and preserve the forests of the Southern Cardamom Mountains of Cambodia.

USFWS: \$53,742 Leveraged Funds: \$246,257

INDIA

ASE1611

Grant # F16AP00326

Participatory conservation of the critical elephant population in the Kaziranga-Karbi Anglong Elephant Reserve, Northeast India. In partnership with the Centre for Wildlife Studies. The purpose of this project is to expand the network of Asian elephant-friendly tea plantations in the Kaziranga Karbi Anglong Elephant Reserve, Assam, India, and build a framework for tracking individual elephants and estimating elephant abundance in this landscape. Specific activities include: (1) holding stakeholder meetings and interviews with tea plantation management and staff; (2) designing elephant management strategies in collaboration with tea plantations; (3) creating a photographic database of adult Asian elephants for individual identification; (4) training tea plantation and forest department staff in elephant tracking; and (5) using capture-recapture methods to estimate the wild elephant population size. This project will contribute to the conservation of the wild Asian elephant population in the Kaziranga Karbi Anglong Elephant Reserve, and strives to return the population to its natural carrying capacity in this important elephant landscape in Northeast India.

USFWS: \$59,300 Leveraged Funds: \$59,350

ASE1612

Grant # F16AP00327

Conservation of the world's largest Asian elephant population through the development of win-win solutions for human-elephant coexistence in Karnataka, India. In partnership with the Centre for Wildlife Studies. The purpose of this project is to assess the spatial distribution and efficacy of current human-elephant conflict (HEC) mitigation measures, and devise and implement a large-scale HEC management program in the Mysore Elephant Reserve (MER), Karnataka, India. Specific activities include: (1) mapping the use of HEC mitigation measures and conducting HEC occurrence surveys to assess the impact of current mitigation measures on HEC occurrence; (2) designing a mitigation framework and engaging stakeholders to assess current use and willingness to participate in a landscape-wide HEC management program; (3) initiating or strengthening the implementation of HEC mitigation measures without

compromising elephant conservation needs; (4) working with insurance companies to develop an HEC insurance scheme; and (5) producing posters and conducting conservation camps in the local language on the do's and don'ts of interacting with elephants. This project will contribute to the conservation of wild Asian elephants in India by reducing HEC in the MER through a sustainably financed, effective mitigation strategy for the entire MER landscape supported by all stakeholders and which will allow the elephant population to return to its natural carrying capacity in the landscape.

USFWS: \$58,020 Leveraged Funds: \$59,250

ASE1614

Grant # F16AP00328

Community-based management of human-elephant conflict in the North Karnara Landscape and transfer of Community-Based Conflict Management technology to Forest Departments of other states in India. In partnership with the Wildlife Research and Conservation Society. The purpose of this project is to contribute to the conservation of wild Asian elephants in North Karnara, Karnataka, India by increasing the tolerance towards elephants via Community-Based Conflict Management (CBCM), disseminate these techniques to other states of India, and influence wild elephant management policy at the national level. Specific activities include: (1) stenthening capacity in CBCM techniques, apiculture, and bee hive fences; (2) training on local elephant-themed handicrafts and elephant dung paper production; (3) producing and screening an educational film on elephant behavior and sociality for local communities; (4) engaging in real-time internet-based monitoring of elephants in collaboration with the Karnataka Forest Department; and (5) transfering CBCM techniques to Forest Departments of other states and influencing elephant management policies through workshops.

USFWS: \$33,300 Leveraged Funds: \$91,600

ASE1616

Grant # F16AP00802

Healthcare program for the well-being of Asian elephants engaged in the protection of Wildlife Areas of Assam, India, Phase-II. In partnership with Wildlife Areas Development and Welfare Trust. This project will provide free healthcare to the captive elephants engaged in the protection of the protected areas of Assam, India, ensuring their well-being and preventing the spread of communicable diseases to their wild counterparts. Periodic Healthcare and Vaccination Camps will be held to conduct routine check-ups including blood, urine, stool analysis, and prevention and control of parasites; and an on-call veterinarian will make visits for emergencies and elephants that need special attention for acute illness, with follow-up visits as needed. Health charts for each elephant will be maintained. Funds will go to strengthening the capacity of mahouts to provide better preventative care to their elephants. Young veterinarians from the region will receive training in elephant healthcare and will be engaged during the Camps; and a network involving veterinarians trained in elephant healthcare will be created so that more timely care can be provided to acute cases. This project will contribute to the conservation of wild Asian elephants in Northeast India, which is home to 15 percent of the world's population of this species.

USFWS: \$35,946¹ Leveraged Funds: \$54,472

¹ Of this, \$14,064 was provided by contributed funds.

ASE1619

Grant # F16AP00329

Project Kazhiru (Elephant): Targeting to achieve zero mortality in human-elephant conflict areas, in partnership with the Tamil Nadu Forest Department, India. In partnership with the Zoo Outreach Organization Trust. The goal of this project is to reduce human and Asian elephant mortality due to human-elephant conflict (HEC) to zero in Coimbatore, Tamil Nadu, India. In partnership with the Tamil Nadu Forest Department, the recipient will conduct train-the-trainer programs to District administrative officers, panchayat (village council) leaders, and ward members. Specific activities include: (1) conducting a one-day training program for stakeholders on program development and leadership, elephant conservation, HEC and mitigation, and proper development planning; (2) planning and organizing mass awareness campaigns in conflict-prone areas of Coimbatore; and (3) evaluating the impact of the program through follow-up meetings and posters. This project will contribute to the conservation of wild Asian elephants by reducing human and elephant mortalities, achieving reduced crop raiding by elephants, recovering elephant corridors, forming multi-stakeholder committees at the panchayat level, and encouraging elephant-centric development planning in Tamil Nadu, India.

USFWS: \$49,950 Leveraged Funds: \$7,200

ASE1629

Grant # F16AP00331

Estimating elephant population size and ensuring wildlife crime prevention through application of genetic technology, Assam, India. In partnership with Aaranyak. The purpose of this project is to support conservation of the Asian elephant through scientifically robust estimation of population size in Golaghat district, Assam, India and to provide support to forensic investigations related to wildlife crimes using genetic technology. Specific activities include: (1) strengthening capacity for field biologists to collect dung samples for genetic analysis; (2) collecting dung samples in Golaghat district for DNA extraction and analysis; (3) conducting four training workshops for Forest Department staff on forensic investigations and standard operating procedures for collection of biological samples at wildlife crime scenes; (4) developing and distributing low-cost genetic/forensic sampling kits for protected area managers in Assam; and (5) upgrading infrastructure at the Laboratory. This project will allow the recipient to further develop the Wildlife Genetics Laboratory as a state-of-the-art forensic DNA facility that will serve as a resource for all of Northeast India in protecting wildlife and prosecuting wildlife crimes.

USFWS: \$49,650 Leveraged Funds: \$11,320

INDONESIA

ASE1604

Grant # F16AP00320

Conservation and monitoring of Sumatran elephants in Bukit Tigapuluh, Indonesia. In partnership with Frankfurt Zoological Society. The purpose of this project is to support and supervise Community-Based Conflict Mitigation (CBCM) in order to decrease both 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) providing 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) recapturing 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 facilitate a 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: \$98,000

ASE1605

Grant # F16AP00321

Developing elephant and other wildlife veterinary teaching, training, and research capacities and an elephant and wildlife ambulance at the Veterinary faculty of the Syiah Kuala University, Banda Aceh, Indonesia. In partnership with the International Elephant Project. The purpose of this project is to support the establishment of a wildlife veterinary education program and wildlife veterinary ambulance services at the Center for Wildlife Studies, Syiah Kuala University, Banda Aceh, Sumatra. Specific activities include: (1) conducting lectures, courses, and workshops on wildlife veterinary medicine for veterinary students and veterinarians; (2) establishing and operating a wildlife ambulance to provide veterinary services for conservation programs; and (3) identifying, developing, and establishing wildlife research projects. By ensuring the existence of elephant and wildlife veterinary expertise, this project will lead to the improved conservation of the Critically Endangered Sumatran elephant in the wild, captive Sumatran elephants working as patrols on conservation response units, and other wildlife in Sumatra, Indonesia.

USFWS: \$54,690 Leveraged Funds: \$164,340

ASE1608

Grant # F16AP00709

Community-based human elephant conflict mitigation and protection of Sumatran elephant populations and habitat through Elephant Response Units in Way Kambas, Lampung **Province**, Sumatra. In partnership with the Community for Sumatra Nature Conservation. This project will contribute to the mitigation and reduction of human-elephant conflict (HEC) in local communities surrounding Way Kambas National Park, Sumatra, Indonesia through securing wild elephant habitat, increasing capacity of local communities to respond to HEC, and strengthening coordination between existing networks, institutions, and local stakeholders. Field activities will be conducted by Elephant Response Unit (ERU) teams consisting of 2-5 trained elephants, 6-10 mahouts, and 2-4 forest rangers. Specific activities include: (1) conducting regular patrols of ERUs to monitor elephant movements, anticipate HEC, and monitor illegal activities and encroachment; (2) providing immediate response to HEC incidents; (3) assisting 18 local communities in developing HEC mitigation capacities; (4) building and maintaining a communication network between local communities and the ERU teams; (5) organizing meetings with local communities, conducting community-based crop guarding, and equipping community scouts from each community; and (6) facilitating open meetings and information sharing between local NGOs, officials, and other stakeholders. Collectively, these activities will

contribute to the sustainable conservation of the Critically Endangered Sumatran elephant in Indonesia.

USFWS: \$73,745² Leveraged Funds: \$175,958

ASE1639

Grant # F16AP00333

Protection of Sumatran elephants and other threatened species in Bukit Barisan Selatan National Park, Sumatra, Indonesia, by anti-poaching units. In partnership with International Rhino Foundation. The purpose of this project is to support the continued operation of the seven Rhino Protection Units (RPUs) in Bukit Barisan Selatan National Park (BBSNP), Sumatra. RPUs, highly trained four-member patrol teams comprised of three local community members and one National Park guard, intensively patrol key areas within the Park. They will deactivate traps and snares, identify and apprehend illegal intruders and poachers, investigate crime scenes, assist with incidents of human-elephant conflict, and monitor threatened wildlife such as the Critically Endangered Sumatran elephants and their habitat. This award will cover the salaries, equipment, transportation, and operation costs of seven RPUs in BBSNP. This project will contribute to the long-term stabilization and recovery of Sumatran elephant populations and biodiversity of the BBSNP ecosystem in Indonesia.

USFWS: \$89,500 Leveraged Funds: \$120,819

ASE1641

Grant # F16AP00373

Support of the Asian Elephant Range States Meeting and the workshop to update the Indonesian Elephant Conservation Strategy and Action Plan. In partnership with the International Elephant Foundation. The purpose of this project is to convene the first Asian Elephant Range States Meeting in over a decade and to update the Indonesian Elephant Conservation Strategy and Action Plan, which expires in 2017. The meetings will be held back-to-back in Banda Aceh, Sumatra, Indonesia, and be hosted by the Government of Indonesia's Directorate General of Nature Resources and Ecosystem Conservation with technical support from IUCN/SSC and organizational and logistical support by Yayasan Resolusi Gajah Indonesia and the International Elephant Foundation. The events will encourage information flow and discussion among range states that will result in consensus of elephant conservation management strategies, including: current status, threats assessment, habitat fragmentation and loss; human-elephant conflict; transboundary issues; future collaborations; and an update to the action plan for Indonesia to conserve its elephants.

USFWS: \$63,710 Leveraged Funds: \$41,030

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

² Of this, \$73,455 was funded by proceeds from sales of the Save Vanishing Species stamp and \$290 by contributed funds.

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 patrol and direct monitoring in the field. Specific project activities will include: (1) use of SMART (Spatial Monitoring and Reporting Tool) 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 Crimes Units to investigate wildlife traders and support government law enforcement agencies with arrests and prosecutions. This project will contribute to the long-term conservation of Sumatran elephants and other wildlife by assisting Indonesian authorities in improving management and combating wildlife trafficking in Bukit Barisan Selatan National Park, Sumatra, Indonesia.

USFWS: \$59,730 Leveraged Funds: \$61,216

ASE1657

Grant # F16AP00343

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 purpose of this project is to assist Indonesian authorities in improving the management of Way Kambas National Park, Sumatra, Indonesia to maintain habitats for the Critically Endangered Sumatran elephant and other wildlife and to assist local communities in co-existing with wild elephants. Specific project activities include: (1) establishment of and training in a data model SMART-RBM (Spatial Monitoring and Reporting Tool – Resort Based Management) that integrates patrol and humanelephant conflict (HEC) data to identify key areas susceptible to encroachment, poaching, and HEC; (2) support to park and law enforcement agencies for encroachment and poaching prosecutions; (3) operation of Wildlife Crimes Units to investigate and support law enforcement agencies to arrest and prosecute elephant traders; and (4) support of integrated farming pilot plots, community-based patrols for HEC mitigation, and evaluation of HEC losses and intervention effectiveness. This project will contribute to the conservation of Asian elephants in Sumatra by decreasing the threats to their survival and increasing the capacities of forest rangers in patrolling and law enforcement.

USFWS: \$45,409 Leveraged Funds: \$61,165

LAOS

ASE1646

Grant # F16AP00336

Plans into action: Strengthening illegal ivory control in Laos. In partnership with the Wildlife Conservation Society. The purpose of this project is to reduce the trafficking of elephant ivory in Laos. Specific activities include: (1) reviewing, updating, and distributing training tools for use by enforcement officers; (2) conducting a multi-agency training for inspection and enforcement officers situated at key transit and trade locations; (3) carrying out an illegal ivory trade awareness campaign at key border ports; (4) conducting targeted multi-agency patrols of key border and transit locations; (5) assisting the government to report required information to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and

its Monitoring the Illegal Killing of Elephants (MIKE) database and Elephant Trade Information System (ETIS). This project will contribute to the strengthening of the control of ivory trafficking in Laos.

USFWS: \$51,549 Leveraged Funds: \$50,035

MYANMAR

ASE1551

Grant # F16AP00139

Inclusive governance for development of Asian elephant conservation in Southern Rakhine Yoma, Myanmar. In partnership with Friends of Wildlife. The purpose of the project is to facilitate and enhance the effectiveness of Asian elephant conservation through participation of a diverse set of stakeholders within the southern Rakhine Yoma of Myanmar. Project objectives include: (1) facilitating a landscape approach to the governance and management of elephant habitat with a focus on improved relationships, dynamic communication, and enhanced governance; (2) supporting and monitoring action plan implementation to ensure compliance, capture lessons learned, and coordinate with the Forest Department, Myanmar Police Department, Special Branch for Investigation, Rakhine Yoma Elephant Sanctuary, and the General Administration Department; and (3) building the capacity of staff from the Forest Department, Myanmar Police Department, Special Branch for Investigation, Rakhine Yoma Elephant Sanctuary, Chin, and local communities to work with line departments on data collection of elephant distribution, detect and deter poaching, and mitigate human-elephant conflict through environmental education, awareness raising, and community participation. This project will establish a participatory model of policy development with local stakeholders and authorities where decisions regarding management of Asian elephant habitat are made within a framework of protecting livelihoods and ecosystem services.

USFWS: \$49,950 Leveraged Funds: \$10,050

ASE1647

Grant # F16AP00337

Community-led conservation of Asian elephants in Myinmoletkhat Key Biodiversity Area, Myanmar. In partnership with the Wildlife Conservation Society. This project will contribute to the conservation of wild Asian elephants through the establishment of community conserved areas in Myinmoletkhat Key Biodiversity Area (KBA), Myanmar. Project objectives include: (1) building the capacity of the Conservation Alliance Tanintharyi (CAT) to collect baseline information on elephants, habitats, and threats for long-term conservation; and (2) establishing a local community elephant surveillance system to support existing Forest Department (FD) and Karen National Union (KNU) law enforcement systems to reduce threats to elephants and their habitat. Specific project activities include: (1) training CAT to assess the distribution and seasonal movements of elephants and document the status of elephant habitats and the distribution of the main threats they face; (2) supporting CAT to conduct key informant interviews and field surveys to assess the distribution and seasonal movements of elephants, habitat quality, and threats; (3) collating, analyzing data, and presenting to the local communities for future action; (4) establishing a local elephant surveillance system by recruiting local wildlife guardians to support existing FD and KNU law enforcement systems to reduce threats to

elephants and their habitat; and (5) informing national policies on protected areas to enable community-based conservation using the Myinmoletkhat KBA as a model.

USFWS: \$43,732 Leveraged Funds: \$45,234

ASE1648

Grant # F16AP00338

Managing human-elephant conflict in Myanmar - Year 2. In partnership with the Smithsonian Institution. This project will lead to next steps in enhancing the conservation of wild Asian elephant populations in Myanmar. Project objectives include: (1) human-elephant conflict (HEC) mitigation implementation and assessment; (2) establishment of wild elephant monitoring teams; and (3) conducting surveys on indirect effects of HEC. Specific project activities include: (1) dissemination of Conservation Conflict Intervention Plans in local villages, documenting the use of potentially dangerous and counterproductive methods, and training villagers in new mitigation techniques; (2) non-invasive collection of DNA samples to determine elephant population size and distribution, identify conflict elephants, monitor populations, and detect poaching through traps and carcasses; and (3) developing and administering a novel interview survey designed to assess indirect impact of HEC on community members. The outcomes of this project will be shared with the Government of Myanmar to support them in making better policy decisions regarding people, elephants, and elephant management in Myanmar.

USFWS: \$50,149 Leveraged Funds: \$42,064

ASE1655

Grant # F16AP00342

Protection and Monitoring the Illegal Killing of Elephants (MIKE) at Rakhine Yoma *Elephant Range, Myanmar.* In partnership with the Wildlife Conservation Society. This project will focus efforts to protect wild Asian elephants and better understand the status of their wild populations at Rakhine Yoma Elephant Range (RYER), Myanmar. Specific activities include: (1) increasing Elephant Protection Units (EPUs) from two to six units and expanding their patrol operations to include parts of the reserve that are thought to support elephant populations but have not received patrol efforts in recent years; (2) upgrading two ranger substations and providing boats; (3) continuing implementation of the SMART (Spatial Monitoring and Reporting Tool) approach to protected area management through the training of EPUs and administrative staff who will manage the law enforcement monitoring database; (4) mapping of elephant distribution and threats; and (5) analyzing satellite imagery to respond to forest encroachment and points of access for poachers. The recipient will work closely with the RYER Warden to help him interpret information generated through the SMART tool so that management decisions may be based upon information coming in from field enforcement teams. Collectively these activities will allow compliance with CITES provisions, improve elephant and site management, and build relevant conservation capacities in Myanmar.

USFWS: \$58,457³ Leveraged Funds: \$59,649

³ Of this, \$32,129 was funded by proceeds from sales of the Save Vanishing Species stamp.

NEPAL

ASE1610

Grant # F16AP00325

Strengthening human elephant co-existence through community education and outreach programs 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. This will be accomplished through the development of community trainers, community education programs, and conducting HECx perception surveys. Specific activities include: (1) two train-the-trainer workshops on HECx which will result in 50 community-level HECx training events; (2) production of 52 episodes of a weekly radio program covering HECx in Nepali and Tharu local languages; (3) production and distribution of HECx booklets; and (4) conducting a community perception and knowledge survey, the results of which will be shared to local and national stakeholders. This project will contribute to the conservation of wild Asian elephants in Nepal's Terai Arc Landscape by increasing the local population's tolerance to and understanding of Asian elephants, thereby reducing conflict between local communities and the wild elephants with which they share habitat.

USFWS: \$47,619 Leveraged Funds: \$16,357

THAILAND

ASE1609

Grant # F16AP00324

Protecting Asian elephants through the integration of ecological research and conflict mitigation in the Salakpra Conservation Landscape, Thailand. In partnership with the Zoological Society of London. The purpose of this project is to contribute to the conservation of the Asian elephant in the Salakpra Conservation Landscape by enhancing their movement and reducing human-elephant conflict (HEC) events through the adaptation of sustainable land use plans, conflict mitigation, and conservation management programs. Specific activities include: (1) development of land use/cover maps for the Salakpra Conservation Landscape; (2) collection of elephant ecological data; (3) identification of elephant dispersal routes and high value habitats; (4) development of a landscape scale habitat management plan; (5) training of community members to collect crop-raiding data; (6) compilation and analysis of crop-raiding data into a database; (7) convening quarterly community engagement meetings to share results, develop land use plans, and identify HEC mitigation techniques collaboratively; (8) implementation of crop-raiding mitigation techniques and analyses of their effectiveness; and (9) development of statistical models to identify drivers of crop raiding. This project will lead to improved conservation of Asian elephants in Thailand by producing an evidence-based landscape scale habitat management plan and implementation of effective HEC mitigation techniques in the Salakpra Conservation Landscape.

USFWS: \$55,961 Leveraged Funds: \$50,381

ASE1632

Grant # F16AP00332

Forward together - Developing a network of wildlife guardians in the Dong Phayayen-Khao Yai Forest Complex, Thailand. In partnership with Freeland Foundation. The purpose of this project is to enhance rapid enforcement and monitoring capacity, expand community-based elephant protection and human-elephant conflict mitigation, and develop a network of stakeholders in Thailand's Dong Phayayan-Khao Yai (DPKY) World Heritage site. Specific activities include: (1) fostering development and networking of civil society organizations to share grassroots conservation best practices through workshops; (2) providing sustainable development of rapid response enforcement capacity through training, expansion of SMART (Spatial Monitoring and Reporting Tool) software, and provision of field equipment; and (3) enhancing wildlife monitoring to improve understanding of elephant abundance, distribution, and landscape usage at long-term monitoring sites, HEC hotspots, and elephant corridors. This project will contribute to the strengthening of protection for wild Asian elephants in the DPKY forest complex.

USFWS: \$59,942 Leveraged Funds: \$36,312

ASE1650

Grant # 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 SMART (Spatial Monitoring and Reporting Tool) patrol system in Thung Yai West Wildlife Sanctuary (TYW) at its current intensity and coverage, build a volunteer network in Huai Kha Khaeng (HKK) from existing volunteer groups and conservation clubs, and train undergraduate wildlife students from Kasetsart University on SMART patrol and wildlife monitoring techniques in HKK. Project activities include: (1) conducting follow-up monitoring with 18 patrol teams in TYW by providing technical support, refresher training, equipment, and patrol rations; (2) entering, reviewing, and analyzing patrol data into the SMART database; (3) preparing and distributing monthly SMART reports; and (4) building a volunteer network by selecting a group of 40 volunteers, including local school teachers, non-governmental organizations, and Thai university students to participate in a five-day wildlife conservation workshop at HKK; and (5) training 30 undergraduate students to receive 20 days of 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: \$59,699 Leveraged Funds: \$61,127

ASE1652

Grant # 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 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 for KKNP staff in law enforcement and monitoring methods, on-the-job SMART (Spatial Monitoring and Reporting Tool) use, law

enforcement monitoring, data analysis, and report writing; (2) reduction of HEC by promoting and monitoring standard HEC mitigation methods in local and a 400-meter extension of the semi-permanent fence in Huai Sad Yai; and (3) expansion of elephant conservation education directed at villagers from HEC target sites 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: \$59,964 Leveraged Funds: \$60,778

VIETNAM

ASE1601

Grant # F16AP00319

Strengthening law enforcement and protected area management in Yok Don National Park, Vietnam, for conservation of the transboundary East Plains Landscape Asian elephant population. In partnership with the World Wide Fund for Nature. The purpose of this project is to leverage the law enforcement capacity developed in Yok Don National Park (YDNP), Viet Nam during Phase 1 of this project by deploying effective law enforcement and SMART (Spatial Monitoring and Reporting Tool) software and Asian elephant population monitoring. Specific project activities will include: (1) training of 50 YDNP rangers in basic law enforcement standards; (2) supporting the Vietnamese Forest Department in the nationwide roll-out and operationalization of SMART software for all national parks; (3) operationalizing SMART in YDNP; (4) assessing SMART reports and providing troubleshooting and technical support; and (5) cooperating with Dak Lak Elephant Conservation Center in biological monitoring of Asian elephants through camera trapping to understand movements and population demographics by providing training and deploying 20 camera traps. This project will contribute to the conservation of the transboundary Eastern Plains Landscape of Cambodia and Viet Nam, Yok Don National Park, the largest protected area in Viet Nam, and the remaining 200-400 Asian elephants estimated to be extant in the landscape.

USFWS: \$53,575 Leveraged Funds: \$64,475

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 project, funded by USFWS since FY 2015, will map the genetic diversity, local effective population size, and landscape connectivity of wild Asian elephant populations in three elephant ranges of the Western Ghats, Tamil Nadu, India. The recipient will: (1) create a DNA profile database of individual elephants that will be shared with the Forest Department for forensic research; (2) quantify and map spatial patterns of genetic diversity across the population; (3) estimate local effective population sizes using molecular methods; (4) use landscape genetic modeling approaches to identify factors that control gene

flow and population connectivity; (5) develop spatially-optimized management alternatives to maximize the protection of population connectivity; (6) predict relationships between population connectivity, genetic diversity, and effective population size; and (7) identify core habitats and corridors using landscape pattern analysis software. This modification is necessary to cover the costs of genotyping, which were significantly higher (US\$70/sample) than originally estimated (US\$23/sample) - due to high costs for chemicals, duplicate samples, and inability to isolate DNA from some samples. Additional funds in FY 2016 will cover laboratory genotyping analysis of the original 200 samples plus an additional 400 samples. Additional laboratory technician costs are necessary, and the services of Project Fellow, Mr. Sedhu Pathy will be covered for an additional year. An additional 6-months of half time salary will be covered for Dr. Jean Philippe Puyravaud for mapping and GIS analysis. This project will contribute to the conservation of the Asian elephant by providing spatially explicit, empirically-based, and scientifically rigorous knowledge to the Forest Department to use in planning and implementing effective elephant conservation programs. Augmenting this award allows the recipient to complete the full scope of work outlined in the original proposal and strengthens the conservation impact by increasing the scale of analysis to have a complete sample of the southern Indian elephant population, including the neighboring states of Kerala and Karnataka along with Tamil Nadu.

USFWS: \$30,000 Leveraged Funds: \$12,000

ASE1524

Grant # F16AP00247

Strengthening communities to reduce human-elephant conflict (HEC) and deforestation through community livelihood improvement training, cooking gas benefits, and conservation education in HEC-sensitive Shyampur village, Hardwar Forest Division, Uttarakhand. In partnership with Conservation Himalayas. This project, funded by USFWS since FY 2015, will make low income, human-elephant conflict (HEC)-affected and forest-dependent women's groups self-reliant in income generation and link that livelihood improvement with habitat and wildlife conservation in order to reduce HEC and deforestation in and around fringe communities of the Hardwar Forest Division, Uttarakhand. Project activities include: (1) conducting meetings with HEC-affected villages and frontline forest staff in order to assess HEC intensity; (2) construction of a Community Livelihood Improvement (CLI) training center; (3) initiation of HEC mitigation and a habitat protection-linked cooking gas subsidy for 50+ HECaffected families (to reduce dependence on fuel wood harvest); (4) conducting two train-thetrainer workshops for village leaders and teachers; (5) provision of anti-poaching training to a subset of community members in order to form a Community Anti-poaching Squad; (6) conducting two joint HEC workshops involving both women's groups and local Forest Department staff; and (7) developing HEC mitigation and habitat protection outreach and resource materials for the CLI center. This project will incentivize villager participation in HEC mitigation habitat protection schemes by providing economic motivators and livelihood improvement training to HEC-affected communities. This modification covers the costs of implementing year two of this two-year project. Augmenting this award allows the recipient to complete the full scope of work outlined in the original proposal and on the original timeline. Leveraged Funds: \$5,420 USFWS: \$23,231

13

INDONESIA

ASE0653

Grant # F13AP00831

An innovative partnership program for human-elephant coexistence and forest conservation in Aceh, Sumatra, Indonesia. In partnership with Asian Elephant Support. This project, initially funded by USFWS in FY 2013, will be carried out in phases. Phase 1 of the project established a trans-disciplinary team to build an innovative model to address HEC and conduct baseline assessment of HEC threats in target districts; disseminate the information widely; increase the effectiveness of laws for the protection of biodiversity and natural resources of Aceh by creating and managing a cross-party, committed, knowledgeable, and constantly expanding legislator network called Aceh Conservation Caucus; and designing and developing a web portal with a thematic structure to provide information on environmental issues, decision-making processes, statistics, including constantly updated databases, as well as serving as a forum for participation and dissemination of the work of the network of environmental legislators. This modification adds funds and extends the project period of performance of this award. This will allow the recipient to carry out Phase 2 of this project. This project contributes to the conservation of wild Critically Endangered Sumatran elephants by addressing the inconsistencies in the set of laws, rules, and institutional authority relating to the use of natural capital and promoting the proper valuation of natural resources among members of the Aceh legislature. It will provide strategic information and life experience to legislators, and promote the formation of a group of legislators with interest and deeper understanding of environmental and wildlife conservation issues, which will be the basis of a broader and well-defined Aceh Conservation Caucus, with legislators and former legislators united in their interest of biodiversity and natural resource conservation in Indonesia. Specific Phase 2 activities include activities from Objectives 1, 2 and 3: (1) development of a strategic land use and agricultural mapping plan for high human-elephant conflict (HEC) areas; (2) initiation of a study to identify, map, and assess the value of agricultural commodity options for farmers within Aceh's elephant range; (3) creating and testing of an elephant-compatible commodity list; (4) preparation and dissemination of all data, research, and maps for presentation to stakeholders and the Aceh Conservation Caucus for adoption in District policy; (5) conducting meetings with Caucus and community members on economic livelihood points of view to address HEC and promote a human-elephant coexistence concept; and (6) building a conservation reward scheme for best practice management in addressing HEC mitigation. This award was provisionally approved for three phases or funding, with each phase's funding dependent upon performance and financial management of the previous phase or year, meeting technical and financial reporting requirements, and availability of funds.

USFWS: \$104,700 Leveraged Funds: \$14,500

ASE1504

Grant # F15AP00499

Way Kambas National Park pilot project for habitat regeneration, fire protection, and elephant conflict mitigation in Sumatra, Indonesia. In partnership with Save Indonesian Endangered Species Fund/ YAYASAN. This project will address three threats to elephant populations in Way Kambas National Park, Sumatra: (1) loss of habitat and intentionally-set fires; (2) elephant mortality due to human-elephant conflict (HEC); and (3) suspected increases

in salinity in Park water sources, which forces wildlife to leave the protected area in search of fresh water. The recipient will address these threats with activities that focus on regenerating and replanting forests, mitigating HEC, and providing sources of fresh water for both wild elephants and fire suppression. Specific activities related to reforestation include: survey and identification of project site, recruitment and training of personnel, construction of project base camp and related infrastructure, survey of naturally regenerating trees in the project site with bird and bat perches installed to facilitate seed dispersal, establishment of plant nursery for propagation of food plants attractive to wild elephants, creation of a fire-management plan, purchase of firefighting equipment, creation and maintenance of fire-breaks, and provision of a dual 24-hour fire and elephant watch system. Activities related to the mitigation of HEC include: recruitment and training of field staff for early elephant warning duty, provision of a dual 24-hour fire and elephant watch system, establishment of a village partnership for sharing responsibility of fire and elephant warning systems, and delivery of an awareness education program to the community. The recipient will monitor salinity of water sources in the Park, construct artificial ponds to collect rain water for both fire response and elephants, and monitor pond usage by wildlife with camera traps. This modification covers the costs of implementing year two of this two-year project. Augmenting this award allows the recipient to complete the full scope of work outlined in the original proposal and on the original timeline.

Leveraged Funds: \$51,000 USFWS: \$40,600

LAOS

ASE1419

Grant # F14AP00408

Strengthening law enforcement patrol and HEC mitigation for the conservation of the Asian Elephant in Nam Pouv NPA, Las. In partnership with World Wildlife Fund - Greater Mekong Program. This project will develop a wildlife crime prevention strategy for Nam Phouy National Protected Area, Laos, including robust protocols for dealing with offenders. It will also improve the capacity of protected area staff and local communities to implement an effective law enforcement patrolling system and implement Adaptive Tactical Patrolling in Nam Phouy to safeguard priority species populations, build community capacity to protect crops, and mitigate damage from crop-raiding elephants. This modification adds funds and extends the project period of performance of this award. This will allow the recipient to continue law enforcement and community outreach activities initiated during the first phase of this project in Nam Pouy National Protected Area, Laos. The following objectives will be continued: (1) implement Adaptive Tactical Patrolling in Nam Pouy NPA to safeguard priority species populations; and (2) building community capacity to protect crops and mitigate damage from crop-raiding elephants. This project supporting law enforcement in Nam Pouy National Protected Area plays a critical role in maintaining the integrity of the remaining Asian elephant population extant in Laos.

USFWS: \$48,740 Leveraged Funds: \$41,700

MYANMAR

ASE1549

Grant # F15AP00331

Educating local people to save Myanmar's conflict elephants. In partnership with Compass Films. This project will create an efficient, state-of-the-art educational campaign, making use of national radio, television, local newspapers, and specifically trained outreach teams to elicit behavior change and consequently reduce loss and damages to property as well as human and elephant fatalities in Myanmar/Burma. Project activities include: (1) analysis of Smithsonian Institution's data from surveys of farmer-elephant conflict; (2) research of education content and interviews with specialists; (3) field production of a short film; (4) studio production of a television campaign; (5) postproduction of the film; (6) creation of support materials; (7) launch of the television, radio, and print media campaign; and (8) free provision of all project materials to non-governmental organizations (NGOs) and the government of Myanmar. This project hopes to provide farmers and other stakeholders with a set of skills and knowledge about elephant behavior that they will use to reduce the danger to themselves, their crops, their homes and to the elephants. This modification covers the cost of implementing year two of this two-year project. In the second year, the outreach campaign will bring the lifesaving messages of the film produced in year one directly to the villagers living in elephant conflict areas. The outreach team will conduct meetings and film screenings in schools and villages and distribute supporting outreach materials, which will be complemented by a broadcast campaign on Myanmar International TV (MITV) and print media. With the expected increase in human-elephant conflict in this region, there is already strong interest by government departments and NGOs for the support materials to be made freely available in digital form for duplication and distribution. Year two activities include: (1) printing duplication of outreach materials; (2) hosting workshops for the educational outreach teams; and (3) conducting school and village educational programs. Augmenting this award allows the recipient to complete the full scope of work outlined in the original proposal and budget and on the original timeline.

USFWS: \$49,815 Leveraged Funds: \$50,600