PEOPLE TRUST ENDANGERED SPECIES
FINAL REPORT

- **Project title**
  Addressing Human-Orangutan Conflict in Agricultural Landscapes in Northern Sumatra

- **Project head**
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- **Institute**
  Orangutan Information Centre (OIC)

- **Country project is based in**
  North Sumatra, Indonesia

- **Project start and end date**
  June 2012 – August 2014

- **Date of report**
  September 2014

- **Species/ habitat**
  Sumatran orangutan (*Pongo abelii*)

- **IUCN conservation action/ research action being undertaken AND/ OR UK BAP target addressing**
  The current IUCN Red List entry for the Sumatran orangutan (*Pongo abelii*) (http://www.iucnredlist.org/details/full/39780/0) is outdated, and does not include any information specific to managing human-orangutan conflict. However, the Indonesian government’s National Action Plan 2007-2017 for the orangutan (Soehartono et al., 2009) considers human-orangutan conflict to be a priority area for intervention, with in addition several other government policies also referring to the need to address the problem of conflict, including the 2004 North Sumatra decree (No.522.51/2235.K), and the Indonesian Ministry of Forestry 2008 decree (Regulation No.48).

- **List and provide details on all main aims of the project and your achievements to date.**

  **Staff recruitment**
  In August 2012, we hired an experienced Indonesian veterinarian, Dr Ricko Jaya, to join the HOCRU team as team leader and veterinarian, so that we are able to operate more independently and rapidly in the field. With that being said, we still work in close collaboration with the Sumatran Orangutan Conservation Programme (SOCP) team, as of course we share the same goal of supporting orangutan conservation. In addition to this, on November 2013, we hired one new member staff for the HOCRU team, Joko Supriyanto. Joko had previously apprenticed with the HOCRU team along with three other candidates. Considering his performance and teamwork abilities, we decided to bring him on full-time. Thus there are now five full-time staff on the HOCRU team.

  **Field Surveys**
  The HOCRU team have been actively surveying for populations of orangutans that are isolated from the main forest body in either small forest fragments or plantation areas. From June 2012 – August 2014, 100 incidents of reported conflict were sent to the HOCRU SMS reporting centre. Based on these reports our HOCRU team has conducted ground checking and confirmed a presence of 35 orangutans from 135 orangutans reported to us, distributed across 25 isolated populations in the provinces of Aceh and North Sumatra. Of these 35 confirmed orangutans, 21 individuals have been rescued in this project period.
Table 1. List of isolated orangutan population monitored from August 2012 – August 2014

<table>
<thead>
<tr>
<th>No</th>
<th>Location</th>
<th>No of reported orangutan</th>
<th>No of Confirmed orangutan</th>
<th>No of orangutan rescued from the area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bakongan/KampungDurien</td>
<td>7</td>
<td>7</td>
<td>5</td>
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<tr>
<td>2</td>
<td>Batu Gajah</td>
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<td>0</td>
</tr>
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<td>3</td>
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<td>3</td>
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<td>8</td>
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<td>0</td>
</tr>
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<td>6</td>
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</tr>
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<td>2</td>
</tr>
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<td>8</td>
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<td>TOTAL</td>
<td></td>
<td>135</td>
<td>35</td>
<td>20</td>
</tr>
</tbody>
</table>

These remaining reported orang-utans, for the sake of conservation, at the same point need some form of intervention to ensure their continued survival and contribution to the wild population. These sites shall continue to be ground-checked, along with any further reported or encountered populations of isolated orangutans, and thereafter monitored and/or evacuated.

Apart from conducting monthly surveys on isolated orangutan populations, in late 2012 the HOCRU team surveyed for a new translocation site in the Gunung Leuser National Park (GLNP), for the special case of RadaRia, a young male born to an ex-captive rehabilitant orangutan in Bukit Lawang, who in February 2011 was taken from the area due to him becoming increasingly aggressive with visitors to Bukit Lawang. The GLNP authority was for two years requesting that he be released back into the park, so our team conducted surveys searching for a suitable area to release him, far from human settlements. A prospective site was found to the southwest of our main national park restoration site in Besitang, in the district of Aceh Tamiang, but in February 2013 the GLNP authority agreed to allow for RadaRia to be admitted into the SOCP reintroduction programme, under which he could be released in a secure forest area, with supervision and monitoring conducted by trained reintroduction staff. We are happy to report that in April 2013 RadaRia was released into the highly protected forest area of the Jantho orangutan

Figure 1. An isolated female orangutan in community farmland
reintroduction site, in northern Aceh. Along with SOCP staff we had actually aimed for this to be the final solution for RadaRia, as it best ensures his survival and welfare. As an update, at the time of writing, September 2014, RadaRia is reported to be doing well in his new forest home, and is on track to becoming a dominant male in the area. The work completed in surveying for a new translocation site will still be of use for future orangutan evacuations.

*Monitoring of translocated orangutan*

Our team has also been conducting monitoring of wild orangutans that we have managed to translocate out of areas of human-orangutan conflict isolated from the main forest body, to ensure the adaptation and survival of the orangutans in their new environment. To support this, on January 2013, we have trained our HOCRU team on orangutan behavioural monitoring, facilitated by Fitriah Basalamah, an Indonesian PhD Candidate under a collaborative partnership between the Anthropological Institute and Museum at the University of Zurich and the Bogor Institute of Agriculture.

On 10 monthly monitoring missions of the main translocation site in the Besitang area of the GLNP conducted in June 2012 – August 2014, we have encountered 14 orangutans that we released into the area. This includes 4 mother-infant pairs and 4 adolescent male, with all appearing to be in good health, and each of them avoiding and/or actively moving away from the monitoring team upon being spotted – a good sign that they are not habituated to human contact.

Besides the existing 5 transect lines have been used by HOCRU team to monitor the translocated orang-utans, in October 2013, in collaboration with Professor Serge Wich of Liverpool John Moores University (UK), we cut 16 computer-generated random transect paths of variable lengths across the translocation site in the primary forest area and our restoration site in the Sei Betung Resort of the GLNP. On the latest survey (July 2014) conducted in the secondary forest of the transect areas, our team did not encountered any orangutans, yet we found 18 nests on the transect surveys.

*Rescues*

Rescues are a 'last resort' action, as each case is inherently very risky. It is necessary to inject these highly arboreal, wild apes with a tranquilizer pistol and then catch the sedated falling orangutan in a handheld net beneath the tree. We do of course take every precaution to minimize the risks, such as through following the orangutan until such time that he/she is in a relatively isolated position from other trees (arboreal pathways of escape) and is located at a lower height, so as to minimize the fall distance.

Regardless of the precautions taken, it is a risky process to forcibly remove a wild orangutan from a forest area, but it has become the reality that without any such intervention, these individuals living in such non-viable, isolated areas will either starve, be exterminated as pests due to crop-raiding, and/or be thrust into the illegal pet trade. Therefore, with the authorization of the BKSDA (Natural Resource Conservation Office of the Indonesian Forestry Department) and Gunung Leuser National Park authorities, the HOCRU team conducts rescue evacuations of orangutans found in such isolated conditions. In these situations, our
experienced field team first observes the orangutan’s behaviour before any sort of intervention/sedatives are administered, to assess whether the individual exhibits natural and not human habituated behaviours (as would be the case with orangutans long held in captivity). Then, after the orangutan is brought down safely through the use of a tranquilizer, our veterinarian inspects the orangutan in the field for any injuries (air rifle pellet wounds, broken bones, superficial infections, etc.) to determine his/her health status. Thereafter, provided that the orangutan is deemed healthy and fit for life in the forest, and with authorization from the relevant government authorities, the individual can then be immediately translocated into protected primary forest blocks. Should the orangutan in question not exhibit sufficient signs of health or behaviour, he/she will then be brought to the SOCP care centre and quarantine for follow-up treatment and/or rehabilitation, and become a candidate for future release back into the forests of Sumatra.

In the June 2012 – August 2014 project period, we rescued 42 orangutans: 20 females and 22 males, with 27 rescued from isolated community farmland areas, 13 confiscated from private residences and 2 picked up by HOCRU team at the BKSDA temporary holding stations at their offices due to medical reasons. Of those taken from isolated farmlands, 22 orangutans rescued were still exhibiting typical natural behaviour from having still been living in the wild on their own (albeit in a conflict situation), and were immediately translocated and released back into protected forest blocks in the GLNP, Jantho reintroduction site, Aceh Tamiang and Pak-pak Barat districts. Meanwhile, from the 15 orangutans that were confiscated from those that were illegally housing them, 10 are still under the care in SOCP quarantine, with the plan being to reintroduce them at an undisclosed date, with one having already been released into the Jantho and another into the Jambi reintroduction site. Unfortunately, the remaining four orangutans passed away soon after rescue due to their having been in states of poor health upon first contact.

**Rescue log**

In late August 2012, our team received a report of an orangutan being kept illegally by a family in Aceh Singkil. The team soon travelled to the area to investigate and along with staff from BKSDA conservation authority, they confiscated a ~3 year old Rocky (male), who was very tame and habituated towards staying with humans. Due to his young age, his (over)habituation with humans and to receive a more careful medical examination for any possible (anthropo)zoonotic disease, Rocky was brought to the SOCP quarantine centre.

In September 2012 a ~25 year old mother and her ~2 year old son were evacuated from an isolated plantation area in Aceh Tamiang, Aceh province, and translocated into the primary GLNP forest area adjacent to our main restoration site. Then on 22 October, Bagong, a ~30 year old flanged male was evacuated from an isolated farmland area in the Langkat district of North Sumatra province, and also released into the same translocation area. On 16 November 2012, together with SOCP field staff and BKSDA Aceh, the HOCRU team rescued ~20 year old male Kermal from community farmland in Simpang Kiri, Aceh Tamiang District. Based on the recommendations of BKSDA Aceh, the orangutan was directly released into the Jantho reintroduction site.
On 6 December 2012, the team went to rescue Cane, a ~10 year old female orangutan in Aceh Tenggara. She had been severely beaten and had suffered multiple fractures to her body and skull, by yet unknown and unpunished individuals. Thus she was immediately evacuated to the SOCP quarantine centre for further medical treatment. About 6 months later, on 30 August 2013, Cane has been released in Jantho.

The next orangutan to be rescued was Natalia, a female orangutan of approximately 18 years of age, who was being kept illegally by a local community member in Suka Ramai, Langkat District. On 29 December 2012, she was confiscated and taken to the SOCP quarantine centre, due to her having exhibited behaviours typical of an orangutan that has long been held captive by humans – in a similar situation as with Rocky. Natalia has been released to Bukit Tigapuluh reintroduction site in Jambi on April 2013.

On 12 February 2013 the HOCRU team evacuated a mother orangutan and her female offspring from an isolated rubber plantation in the Sampan Getek region of North Sumatra. The mother, named Bintang, was estimated to be 30 years old, and her daughter, named Kejora, around 7 years old. The pair had been stranded and cut off by 5 km of plantation land from returning to the national park. Such a distance would be highly dangerous, perhaps to the point of being impossible, for an orangutan to cross. Bintang was presumed to be 6-9 months pregnant, with the vet having found an additional heartbeat from her abdomen. They too were returned to the national park. Two days later, on 14 February 2013, the HOCRU team returned to the area to continue monitoring isolated orangutans. They encountered ~28 year old Valentina and her ~8 year old male offspring named Valentino, whom they managed to bring down safely and after the standard medical examination, were brought to the translocation site for release.

On 27 March 2013, the HOCRU team received a report of a stranded orangutan in isolated farmlands in Sungai Raya, East Aceh. Here, the team found a ~4year old male and after spending entire day following him, they managed to bring down the orangutan safely. Based on the information from local people, the orangutan had formerly been kept by a local police officer in the Lokop region, but as the orangutan grew and became more unruly, problems arose in the household and he escaped from his cage three months previously, and had since been wandering in the farmlands. Due to his young age it was decided that he should be admitted to the SOCP reintroduction programme.

In the following month, the team responded a report from a GLNP ranger of an orangutan being illegally held by a farmer in Kedaung, Bukit Mas, Langkat district. Thus together with BKSDA North Sumatra staff the HOCRU team went to the location and confiscated a ~2 year old male orangutan, that appeared to be malnourished, and also had a number of both fresh and old wounds on his body, with the ‘owner’ claiming that he had rescued the orangutan from a vicious dog. We immediately evacuated the orangutan and admitted him to the SOCP centre, where he received better medical training and would be released someday.

On 9 April 2013, another report of isolated orangutan was received by HOCRU team, who soon travelled to the area, in Bukit Timur, Padang Tualang, North Sumatra. Here the team encountered a number of old sleeping nests – and after two days of searching, the team
located an adult female and adolescent male orangutan travelling together (it is thought that they may be a mother offspring pair). Considering the immediate danger inherent with the conversion to oil palm plantation (in this case through the use of bulldozers), it was decided to translocate these orangutans to a protected forest area. Therefore, on 21 April we arranged with BKSDA North Sumatra staff to conduct an evacuation, but in the end the team was only able to locate and relocated the ~25 year old, 30kg female. On inspection she had healed-over air pellet wounds a cross her body, including on her face, but regardless of this evidence of previous conflict her vital signs and general condition was deemed to be healthy. She was translocated and released into the GLNP forest area adjacent to our main restoration site in Besitang. We returned to search for the adolescent male but have since been unable to locate him again.

On 11 April we visited an area previously reported to be experiencing conflict near Tampe village, Babussalam sub-district of Aceh Tenggara. At the site of reported conflict, within a cocoa farm owned by a local person in a rambung merah tree where in it was said orangutans often nested, we soon confirmed that that the farm was located 1km within the boundaries of the national park, and was therefore entirely an illegal development inside what was meant to be protected wildlife habitat. Thus there is no justifiable reason to attempt to shift the orangutan from this region, as it is demarcated as a protected area. The GLNP and BKSDA authorities have been informed about this matter, yet unfortunately there is still no action taken by these them until now.

On 26 April together with staff of BKSDA Aceh, we confiscated a 4 year old orangutan, later named Jack, that has been illegally kept in an amusement park located in Aceh Besar, about 15 km from Banda Aceh. The HOCRU team found his condition to be very critical and in need of urgent, serious medical treatment due to malnutrition and parasite infestations. However, on 8 May, after being taken for treatment at the SOCP quarantine, Jack succumbed to these health issues and passed away.

On 29 April, HOCRU and SOCP had to relocate a 30-year-old, 90 kg male orangutan isolated in a farmland area in Lae Bersih, Subulussalam, Aceh Singkil. This orangutan was safely tranquilized and upon inspection found to be in relative good health. Thus it was decided by BKSDA North Sumatra to translocate and immediately release him into a protected forest area in Tampu Mas, Pak-pak Barat.

Later on 29 May, along with BKSDA North Sumatra, we were able to confiscate a ~1.5 year old orangutan male being held captive in a palm plantation office owned by PT Anugrah Langkat Makmur, Sekoci in North Sumatra, and brought him to the SOCP care and quarantine centre in North Sumatra, where he was taken care until now.

In June 2013 we received another report of an orangutan being kept in Nagan Raya, Aceh Selatan. This individual the BKSDA had reportedly tried to confiscate two years previously, but failed in the attempt since the ‘owner’, Samsuardi, who is also a senior member of the DPRK Nagan Raya legislature for the 2009-2014 period, refused to surrender the orangutan. Thus on 21 June together with the SOCP, BKSDA Aceh, and also the police department we descended on the site and found the young orangutan in a cage in the yard. According to BKSDA staff, the ‘owner’ said that he would only surrender the orangutan to the Nagan Raya local police, and not the district police. Rather than delay the process

Figure 5. A female orangutan illegally kept in a private zoo in Aceh Selatan
and/or provide any further excuses for not confiscating the orangutan, we chose to go to the local police station to attempt to have them arrive on the scene. Here, unfortunately we were told by BKSDA Aceh staff to suspend our attempts to confiscate the orangutan until such time that staff from their headquarters in Banda Aceh could further investigate the matter. So we unfortunately had to leave the area, and travelled to Kandang, Aceh Selatan, to attempt a separate confiscation at another known location where an orangutan was being held. Thus on 22 June the joint team arrived with the North Kluet District police department to conduct a confiscation at the home of a local person. At the house there was a miniature zoo in the yard, with multiple species such as pig tailed macaques, hornbills, crocodiles, snakes, and 2 orangutans, thought to be 4 and 7 years of age. The 4 year old female was said to have only been at the house for approximately 2 weeks, with the 7 year old female, said to have been at the location for the past 5 years, with the household's children being the primary caregivers of the captive animals. After an hour of discussion, we were finally given permission to take the orangutans to the SOCP quarantine – with since this time the older female having been released into Jantho in August 2014.

On 27 June 2013, the HOCRU team together with SOCP staff confiscated an adult female orangutan being kept by a community member of Panton Luas, Aceh Selatan. This orangutan had massive swelling to its head and body, along with a serious eye injury and bleeding under the skin around her jaw. We immediately evacuated the orangutan from the area and started the long drive back to the SOCP centre – but unfortunately within two hours the orangutan had died in transit. The assailant(s) who had beaten this orangutan and left her for dead next to the river area where we encountered her are to this day unknown, and have gone completely unpunished.

On 21 July 2013, the team returned to Bukit Timur, Padang Tualang to attempt an evacuation of the isolated orangutan in the area, that was reported and sighted on April as discussed above. After two full days of searching, the team found different individual orangutan, a ~15 year old, 40kg female, nesting on a top of an oil palm tree. She was successfully sedated, and upon a field examination was found to have several air rifle pellet wounds. Those that were close to the surface were immediately removed through incisions, with one located approximately 2cm from her eyeball. Apart from these superficial wounds, her health status was deemed sufficiently clear for a translocation, so the team immediately transported her to the GLNP forests adjacent to our forest restoration site for a planned release the following morning. However, after the orangutan fully awoke from the sedative it became clear that it would be dangerous to keep her in the transport cage overnight, as she was very active in attempting to escape. Therefore the team took her to a secondary forest area within the site and released her from the cage at 23:00 – where she immediately took to the trees and built a sleeping nest.

We later received a report from the local community on 26 July of an orangutan isolated in the farmlands of Sumber Jaya village, Langkat district, North Sumatra. After confirming the presence of a large (80kg) ~30 year old female orangutan with massive swelling to its head and body, along with a serious eye injury and bleeding under the skin around her jaw, the team took immediate action to evacuate her. However, within two hours of the drive back to the SOCP centre, the orangutan had unfortunately passed away. The assailant(s) who had beaten this orangutan and left her for dead next to the river area where we encountered her are to this day unknown, and have gone completely unpunished.

![Figure 6. A female orangutan has just been rescued by HOCRU from community farmland in Padang Tualang, Langkat, North Sumatra](image-url)
male, on this same day the team made a number of attempts to sedate and move the orangutan from this area that had become isolated from the forest (by approximately 15km), but had difficulties in reaching the male since he was remaining high in the trees and far from the numerous village spectators who had come to see this sight. Thus on the first day we were unable to bring him down safely, and the team camped out beneath the tree in which the orangutan had taken refuge, so as not to lose him the following day, when another attempt could be made. At 6 am the following morning the team worked to shift the orangutan to an area with fewer and lower trees, so that he could be sedated more easily and safely. At 8 am they succeeded in darting the orangutan, and caught him in a rescue net on his descent. On medical inspection he was found to have some disfigurement/stiffness in his right wrist, perhaps as a result of a conflict with another orangutan, a fall, or some other unknown reason. It was decided that the best course of action for the orangutan would be to transfer him to the SOCP quarantine for a full medical assessment and observation period. Three months later, on 7 October 2013, this orangutan named Jagat, was released at the Bukit Tiga Puluuh site in Jambi, witnessed by our veterinarian who joined the release process, as discussed below.

In July we also learned of and confirmed the presence of a sub adult male being illegally kept in Aceh Tamiang. This male, named Pongky was being held by a high-ranking Indonesian police officer, and upon encountering him for a confiscation attempt with government conservation authorities, he refused to comply, and the government declined to take any action. Later in August we found that Pongky and another, unrelated juvenile orangutan that was unknown to us, had been placed in the Medan Zoo, which is a far less desirable outcome to a return to the forests (as the Indonesian National Action Plan mandates). On September 2013, YOSL OIC worked to petition the authorities to have these orangutans placed in a reintroduction programme, and started a media campaign/petition in support of this. In collaboration with staff from the Centre for Orangutan Protection (COP), a meeting was held also in September with the Director of Biodiversity Conservation at the Indonesian Ministry of Forestry in Jakarta, to discuss the disposition of Pongky. The Director agreed that these orangutans should not have been placed in a zoo, and stated that he would issue an order for them to be transferred to the SOCP care and quarantine centre. As a follow up, in March 2014, the Ministry of Forestry invited OIC and SOCP representatives to Jakarta to meet with the head of the Biodiversity Conservation Department at the Ministry of Forestry, the heads of BKSDA Aceh and North Sumatra, and the Secretary of the Indonesian Zoo and Aquarium Association. Unfortunately, the Ministry of Forestry made the decision that either Pongky or the other young orangutan can leave the zoo and be sent to SOCP quarantine only if a substitute orangutan was brought to the zoo as a replacement. This is of course unacceptable, with due to the poor conditions at the Medan Zoo, it largely being considered equal to a death sentence. However as the Ministry of Forestry is the governing authority, and the Medan Zoo is listed as an official ‘conservation institution’ that is able to hold confiscated protected animals, we were forced to accept their decision. Therefore, despite a change.org petition having gathered nearly 9,500 signatures (http://www.change.org/en-GB/petitions/send-pongky-back-home-to-the-forest), along with various media pressure and lobbying to the Ministry of Forestry, Pongky and the other orangutan still remain in Medan Zoo until now.

Figure 7. Orangutan Jagat being transferred to SOCP quarantine
Later in August 2013 we received a report of yet another orangutan being held illegally in Aceh. Together with staff from BKSDA Aceh on 28 August 2013 we travelled to Langsa, East Aceh to arrange for the confiscation of a ~14 year old female orangutan named Manohara, whom was for the past 2 years being kept by a local police officer. After a lengthy series of negotiations involving the head of the village, the wife of the ‘owner’, the ‘owner’ himself, BKSDA staff, and OIC staff, it was finally found permissible that the orangutan be removed from the family’s land and taken to the offices of the BKSDA Aceh in Banda Aceh, as we were not given permission to transport Manohara directly to the SOCP quarantine centre for reasons yet unclear. However, as will be explained below, in November 2013, Manohara and another female orangutan were eventually taken from the BKSDA office to the SOCP quarantine.

On 26 September 2013, we received a report of an orangutan mother-baby pair being isolated in a small forest patch located inside a palm oil concession owned by PT. Mestika Prima Lestari Indah (MPLI) in Aceh Tamiang. The workers that were clearing the forest area inside the concession for development said that that the orangutans had been isolated in the small forest patch for a week, and there was not enough food for them to survive. They also admitted to having attempted to capture the ~2 year old male infant, for sale into the pet trade. So that on 28 September 2013, HOCRU team arrived and on 30 September 2013, with the assistance from Forest Nature and Environment of Aceh (HAKA foundation) and the BKSDA Aceh, managed to safely bring down and relocate the orangutans into protected forest in the Leuser Ecosystem near Tenggulon village, Aceh Tamiang.

On 1 October 2013, we received a report from the local community of an orangutan isolated in the farmlands of Kilang Alay, Langkat district, North Sumatra. After confirming the presence of an adult female ~24 year old, on this same day together with BKSDA North Sumatra the team decided to evacuate and translocate the orangutan. This evacuation was relatively quick because the orangutan was traveling among the lower ends of the tree canopy. Soon after being tranquilized, the net was set and the orangutan was brought down safely. After a thorough health check, the HOCRU team immediately transported her to the GLNP forest adjacent to our forest restoration site in Besitang and released her.

From 4 to 7 October, together with staff from the SOCP, HOCRU veterinarian Dr. Ricko escorted 3 orangutans from the quarantine centre to the orangutan reintroduction programme at Bukit Tigapuluh National Park, Jambi. Of the three orangutans reintroduced was Jagat, the male orangutan that the HOCRU team had evacuated from an isolated community farmland.

On 7 October 2013, OIC Founding Director Panut Hadisiswoyo was involved in a dramatic rescue of a young female orangutan that was spotted on a becak (motorized rickshaw) in the streets of Medan, the capital of North Sumatra. The driver refused to surrender the orangutan to our custody, which resulted in Panut jumping onto the vehicle and telling him to pull over and stop, with the driver still refusing whilst issuing threats. Fortunately, the becak broke...
down, forcing him to stop, with Panut remaining with them until suddenly another person arrived and took the orangutan by motorbike to an unknown location. After remaining with the original perpetrator for another 15 minutes, the BKSDA wildlife protection authorities that we had alerted arrived on the scene, and an interrogation began unto the where about of the orangutan. The man admitted that the orangutan ‘belonged’ to his employer, and the authorities then forced him to bring us to that location, where we found a vacant house. After forcing him to continue trying to call his employer, we eventually found that the orangutan had been moved to another house owned by the family, located approximately 100m from the first house. There we encountered the orangutan, and with the government authorities we immediately confiscated and evacuated the orangutan to the SOCP quarantine centre.

On 21 October 2013, the HOCRU team rescued a ~30 year old female orangutan isolated in a rubber plantation near Paya Tusam village, Wampu sub district of Langkat. This location was approximately 3km from Sejagat village, where we had also recently rescued an adult male orangutan named Jagat. The following day the HOCRU team released the orangutan, named Putri, into the GLNP forest near the main OIC restoration site in Besitang. On 23 October 2013, HOCRU together with staff from SOCP and BKSDA North Sumatra travelled across Sumatra and thereafter by boat to Gunung Sitoli, Nias Island, to confiscate an ~8 year old female orangutan that was being held by a Catholic church foundation. The priest told that the orangutan was brought to the island as a gift to the foundation, which also manages a miniature sort of zoo. The owner of this foundation agreed to surrender the orangutan after the OIC reported the case to BKSDA, so she was then brought to the SOCP quarantine. While some of the HOCRU team was in Gunung Sitoli, on the same date, the remaining HOCRU team members on the Sumatra mainland made a joint effort with SOCP staff to evacuate a large ~40 year old male orangutan which was caught by a local community in Mane, Aceh. The team made the 14-hour drive from Medan to find a chained, injured orangutan, which the local people had brought down from a tree by cutting it down with the orangutan still in it. There was clear evidence that the orangutan had also been beaten, so the team made a rapid effort to evacuate the orangutan and bring him to the safety of the SOCP quarantine centre. However, the orangutan had suffered too harshly at the hands of the local community, and unfortunately died in transit. Based on a postmortem examination, the orangutan died due to internal bleeding.

We received a report on 7 November 2013 that the orangutan that was being held at the BKSDA office in Banda Aceh since the HOCRU team had arranged for her rescue in August 2013, had fallen ill with a respiratory condition. The HOCRU team was thus called in to evacuate the above-mentioned orangutan, Manohara, along with an additional ~8 year old female orangutan called Monic that the BKSDA had confiscated on their own two months previously. Together with staff from the SOCP, on 9 November 2013 the team travelled to Banda Aceh to pick up the pair and transport them to the SOCP quarantine.

On the 18th of November we received a report from the BKSDA North Sumatra of an injured orangutan in a salak fruit plantation in Sugi Tonga village, Tapanuli Selatan—not far from the Batang Toru research site and wild orangutan population. We were told that the orangutan
was in critical condition, with many wounds in need of immediate medical attention. Thus together with staff from the SOCP, we made the 12-hour drive to the region from Medan. On arrival the ~24 year old male orangutan was found approximately 6 meters up a tree, and after being brought down by tranquilizer, was found to have 4cm lacerations to the head, 7cm wounds on the back, and multiple other wounds to the body. It was estimated that the wounds were inflicted up to 2 weeks previously, with the orangutan appearing to be in a very weak state. Due to the serious nature of the wounds, a drip infusion was started with emergency first aid treatment, with after a brief monitoring period the orangutan determined stable enough to be evacuated back to the SOCP quarantine and care centre. Unfortunately, the orangutan was unable to recover from the injuries received at the hands of unknown and unpunished perpetrators, and ultimately he succumbed soon after arriving at quarantine.

In late December 2013 the team received a report from the community in Ujung Pandang, Bakongan sub district, South Aceh, of orangutans found consuming young oil palm trees from their plantations. Initially we tried to instruct the GLNP and BKSDA officials on tactics we have used to push/scare orangutans back into the forest, but due to growing concerns of the community and in order to avoid the possibility of danger to the orangutan(s), the team decided to travel to the region to investigate. Thus on 4 January HOCRU arrived and found a population consisting of 2 adult females with 2 accompanying offspring and 1 adult male, all taking refuge in a ~5 hectare forest fragment located near the GLNP border. This fragment is also destined to be cleared and converted to oil palm, so that ultimately the entire population will have to be shifted as they will soon no longer have any sort of refuge to live in. The community had said that there were up to ten orangutans in the area, with the lone ~30 year old 80kg adult male being the individual that caused the most problems in terms of conflict. The team thus decided to first intervene on his behalf, and on the 5th of January managed to tranquilize him and conduct a medical examination on him. He was found to be in good health, so that with the support and authorization of the BKSDA and GLNP authorities, he was transported to the protected forest area adjacent to the Suaq Balimbing Research Station, with the aid of SOCP staff and infrastructure. HOCRU has added the site to its list of populations in need of monitoring and intervention – with their since having returned to check on them in February and June 2014, without having encountered any orangutans at those times.

On 13 March 2014, our HOCRU team visited Litur village in Langkat, North Sumatra, after local farmers contacted our team about the presence of 7 orangutans in their rubber plantation that has been mixed with palm oil. They stated that the orangutans had been roaming in their plantations for years, but that they now needed to be shifted as they claimed an increased amount of raiding and damaging crops. After searching for two days, the team found one adult male orangutan, one adult female orangutan and one young male orangutan in the plantation. Thus on the 15th of March the team managed to bring down the ~8 year old male, and together with BKSDA in North Sumatra the team decided to evacuate and translocate the orangutan. After a thorough health check, the HOCRU team immediately transported her to the GLNP forests adjacent to our forest restoration site in Besitang, where he was released into this new home and given a second chance of life in the wild. Then on 15...
April 2014, the team returned to the same location and managed to evacuate the other orangutan male. As it was fruiting season there, the local community had complained that there were orangutans consuming their petai crops from their farmlands. The ~15 year old orangutan, since named Angelo, was brought down by the HOCRU team without any incident, and immediately thereafter taken to the SOCP quarantine centre, where he was to be housed for a minimum of 30 days for monitoring, and thereafter released to Jantho reintroduction site on 21 May 2014. The remaining confirmed female has not been seen again, and during the monitoring conducted in this area on June and August 2014, the team did not encounter any other individuals.

In late May 2014 the HOCRU team received a report of conflict in a village in Aceh Tamiang. After descending to the area to conduct a field survey alongside NGO partners FKL (Forum Konservasi Leuser) and the BKSDA Aceh, on 13 June 2014 the joint team encountered a ~12 year old orangutan female isolated in a rubber plantation owned by the local community. This area had become severed from any natural forest area, so that the orangutan could not on her own travel back to a more natural setting, and also could not safely remain in the relatively small plantation where access to food resources was very minimal, and probability of conflict with humans very high. An agreement was then reached between parties, including the Aceh provincial head of the BKSDA, to translocate the female to a protected forest area in the region. Therefore on 14 June the orangutan was brought down and upon a medical check-up was found to be in a malnourished but otherwise healthy condition, and thus fit for immediate translocation. She was immediately taken to a protected forest for release, where she took to the trees of this her new forest home.

On 4 June 2014, together with partner NGO the Centre for Orangutan Protection (COP) and BKSDA Aceh, the HOCRU team confiscated a 2-year-old infant female orangutan that was being illegally held by a community member in Aceh Selatan – whom had reportedly done so for one year. The infant orangutan was brought to the SOCP quarantine for medical care and rehabilitation.

On 4 August 2014, HOCRU team travelled to Gayo Lues after receiving a report from the government Forestry and Plantation office of an orangutan being illegally held in the area. Here we found a very young male orangutan, estimated to be 10 months old, that was being kept by a resident in Pepelah village, Pining sub district, Aceh province. The male was malnourished, dehydrated, and had minor injuries on his face and appendages was thus immediately evacuated to the SOCP quarantine for follow-up care. It is assumed that the injuries were sustained in the process of the local people having killed and brought down his mother, in order to secure him for likely sale into the pet trade – although the local people adamantly claimed that the orangutan had simply abandoned her baby. Until today the orangutan, since named Pepe, remains in the care of SOCP, where he is reported to be doing well and a future candidate for reintroduction.

On 16 August 2014, the HOCRU team together with BKSDA Aceh and GLNP staff relocated a young female orangutan isolated in a farmland in Ujung Padang village, South Aceh to a protected forest area near Bakongan. After translocating this isolated female orangutan, the team together with visiting staff from International Animal Rescue (IAR), along with BKSDA and GLNP authorities, relocated another isolated female orangutan with her baby from a
farmland in Druin village, Bakongan, South Aceh, on 17 August 2014. The orangutan mother and the baby were safely rescued and on same day translocated to the nearby protected Leuser Ecosystem forest block.

On 25 August 2014, together with SOCP and BKSDA Aceh we rescued a male orangutan roaming in a farmland in Tanah Terban village, Karang Baru, Aceh Tamiang. The ~5 year old orangutan was previously kept illegally by a member of staff at a government office (Aceh Tamiang plantation office), who had since a year previous had managed to escape. Amazingly enough, at the time of rescue the orangutan still had a rope around his neck from his period of captivity, but appeared otherwise unaffected or harmed. Nevertheless, the orangutan was brought to the SOCP quarantine for follow-up care and could be released some day.

**Community Education**

Conflict mitigation efforts have a far greater chance of success if the local communities are active in independently managing conflict on their own land. The proximity of plantations to the forest boundary is the main predictor of vulnerability to orangutan crop raiding. Thus HOC can be significantly reduced if farmers and relevant authorities agree to establish buffer zones between forests and plantation boundaries of at least 20-30 metres. In January 2013 a community conflict mitigation workshop was hosted by the HOCRU team in the Simolap area of Marike, adjacent to the Gunung Leuser National Park. Both the park authority as well as the local people requested this workshop. There were 30 people in attendance, who were all trained on how to make and use handheld firecracker bamboo cannons, about passive methods for conflict avoidance and mitigation, and also practical conservation education. Similar workshops were also conducted by the HOCRU team, with a total of 150 people in attendance, in Rimba Sawang area of Aceh Tamiang (February 2013), Ketambe of South East Aceh (March 2013), and Bakongan of Aceh Selatan in May 2013. Later in September 2013 the HOCRU team hosted another session for 30 staff members from the BKSDA North Sumatra (Sidakalang region) Conservation Authority. Apart from these more formal training sessions, at regular survey visits, rescues, and evacuations, the HOCRU team also educated the local people present about conflict issues. Here in addition to peaking on the relevant issues, we also trained 255 farmers on conflict mitigation methods. Therefore in period August 2012 – August 2014, we have trained 465 people, consisted of farmers, and BKSDA officers on conflict and mitigation methods.
In this project period, we have also produced 2,000 brochures and 2,000 posters on HOCRU’s role and Human Orangutan Conflict issues. These have been distributed to the communities where the human orangutan conflict occur, such as Tanjung Putus, Soelkam, Kaperas, Batu Gajah and SeiLitur, in the Langkat district of North Sumatra and Gayo Lues, Aceh Tamiang, and Aceh Selatan in Aceh province. In addition, during monitoring visits to villages adjacent to areas hosting isolated orangutan populations, and thus prone to incidents of conflict, the team also discussed and socialized conflict mitigation methods with community members that they met. Hence, from August 2012 - August 2014, in total approximately 1,123 community members have been involved in education and outreach activities under HOCRU.

**Questionnaires**

During the project period the team collected data regarding human orangutan conflict from 420 people across 13 villages in the Langkat district of North Sumatra, 4 villages in the Aceh Tamiang and South Aceh districts of the Aceh province, with locations selected based on their proximity to orangutan habitat. Respondents were 92% male and 8% female, with an average age of 40 years old, and 90% being farmers. All had lived in their respective areas for over 5 years. 92% of respondents were able to correctly identify orangutans from photos, with 65.7% of them claiming that orangutans had disrupted their crops. Of those affected, 60.4% said that they had not previously reported any losses to conservation authorities or village government and of those that had, they only reported to village government leaders. The most damaged crop was rubber (50.7%), followed by durian (25.7%) and jack fruit (15.7%). 24.3% of respondents said their worst periods of crop-raiding occurred from July to September, with 52.2% claiming October to December, and the remainder stating that they had experienced smaller losses throughout the year. 86.1% of respondents said that they knew the orangutan was protected by Indonesian law, with 80% of them saying that when they encountered orangutans in the farmlands, they did not attempt any sort of intervention; with the remaining 20% stating that they tried to scare the orangutans away by shouting and making loud noises. The prevailing attitude (86.1%) expressed for the conservation management of these orangutans is to move...
them to other areas, with the remaining respondents claiming it was fine to have no such intervention. They mostly (76.9%) feel that the Ministry of Forestry is responsible for their management, with the remainder stating that it is the job of NGOs to handle such protected species. To this end, 69.4% of respondents said that they felt the Ministry of Forestry was not highly concerned about the matter, and was not assisting them in managing the situation.

- List and provide details of any aims that haven’t been achieved and why

With increasing conflict incident reports, HOCRU seems to require additional team that will be focused on regularly monitoring known isolated populations of orangutans as well as orangutans already translocated through the HOCRU programme. We also must be careful not to overpopulate the primary forest area adjacent to our restoration site in the Sei Betung Resort of the GLNP where we have translocated 12 individuals, so that we are also looking to find an additional primary release site, so as not to overpopulate the region. Discussions have thus been held with our colleagues at the SOCP whom manage the site, as well as the relevant government authorities, of releasing these orangutans into the Jantho reintroduction programme in northern Aceh. This site is considered largely under populated, with thus far the only orangutans present being those released into this near pristine habitat that hosted no previous wild population. Here too there is the additional benefit of there already being a regular post-release monitoring programme in place, so that the (behavioural) health of the population can be better maintained. However before this can be fully realized, additional meetings and agreements will have to be made with the government authorities.

The number of rescued orangutans has been increasing over the years since HOCRU programme was established in 2010. From our monitoring, several orangutans which are currently stranded in plantation areas and illegally kept by local residents are now awaiting rescue missions by the HOCRU team. Although rescue and translocation is the last resort due to potential risks, without proper law enforcement from the government to uphold conservation practice, these situations often force the HOCRU team to become involved and conduct such operations. This has been exacerbated by the fact that during confiscations and rescues, any potential for prosecuting those found holding and/or harming orangutans is lost with the matter becoming a ‘voluntary surrendering’ of the protected animals, rather than a ‘confiscation’ case. We are adamantly working to have this conversion ceased, so that perpetrators can be punished, and the law upheld – which will serve as a warning and disincentive for others to interfere with protected species.

- Was your methodology sound and repeatable in other areas? Have you revised it whilst undertaking your project?

Methods that we have been using to manage and mitigate HOC are sound and repeatable in other areas and thus applicable to be implemented by other organizations working elsewhere in the region. The Kutai National Park authority in East Kalimantan, Indonesia, who invited HOCRU staff and the OIC’s Founding Director to demonstrate and share our techniques, has implemented methods developed through the HOCRU. Until now, we still receive calls from this national park authority to provide technical advice on addressing HOC. We have also participated in a national workshop to develop a Standard Operation Procedure (SOP) for orangutan translocations, with our work presented as a case study. Furthermore, we have conducted rescue/training work with visiting staff from the Centre for Orangutan Protection (COP), an Indonesian NGO active in Borneo in dealing with illegal keeping of orangutans and orangutan rescues from isolated conditions. Also too we have done similar missions with visiting staff from YIARI (Yayasan International Animal Rescue Indonesia) to facilitate knowledge exchange with the HOCRU team, with a visit planned for HOCRU to travel to Borneo to study conditions and additional methods employed there. Lastly, staff from the BKSDA authority as well as farmers across the northern Sumatra region has been trained to implement our best practice mitigation techniques to reduce incidents and severity of conflict on the ground.
We have been also active in promoting our HOC mitigation methods through various seminars, conference, workshops and presentation as this could also be adapted to mitigate conflicts of other wildlife as well by other organisation. In terms of translocation procedure, on 11 April 2014, HOCRU hosted a workshop on orangutan translocation issues at its office headquarters in Medan. The workshop was attended by 40 people representing GLNP, BKSDA North Sumatra and Aceh and conservation NGOs. During the workshop, BKSDA North Sumatra and Aceh agreed that the rescue and translocation of orangutans must be coordinated by the BKSDA and GLNP authorities and thus, as HOCRU is the only unit in Sumatra that deals with isolated orangutans and translocation, that they will support HOCRU through assigning their field staff to serve on the team when necessary. It was also discussed that the translocation procedures must follow the guideline from the Ministry of Forestry. Based on this guideline, any orangutans isolated in farmlands can be directly translocated to the natural forest as it was presumed that the orangutans had no contact with humans. The issue of selecting a translocation site was also discussed, and it was agreed that Jantho orangutan reintroduction site offered very favourable conditions for this. As a result of this workshop, a practical Standard Operational Procedure (SOP) for orangutan translocations was formulated and now considered in draft phase. To support this, at the moment, HOCRU and SOCP is also working to develop Disease Risk Assessment (DRA) to provide a better protocol in translocation process.

- Please detail how your project has contributed to the long-term conservation of the species you are working on. If it has not, please explain.

The HOCRU team has been roving through forest-adjacent farmlands to survey for potential orangutan conflict areas and respond to any instances encountered or reported through our conflict SMS reporting centre. The HOCRU project has brought the attention of key stakeholders to address HOC problems more seriously. Collaboration between the HOCRU team and SOCP, BKSDA and the GLNP authority has been growing in a positive direction with a shared goal to save orangutans from conflict and isolation. This shows a positive impact on orangutan conservation, as before the HOCRU programme began, orangutan conflict issues were not being addressed by any relevant agencies in the region. Local communities used to have no means of reporting wildlife conflict instances, but now they are working together with us to address HOC challenges and offer solutions.

The HOCRU team since its inception in January 2010 has been involved in the rescue and evacuation of a total of 51 orangutans. Of these, 20 have already been released into the GLNP area adjacent to our restoration site, 4 orangutan had been released into GLNP area in South Aceh, 4 have been released in protected forest in the Aceh and North Sumatra provinces, 5 have been released into the Jantho reintroduction programme, 2 have been released into Bukit Tigapuluh reintroduction programme, and the remaining 12 are still being cared for in the SOCP quarantine centre. Most unfortunately, 4 orangutans have died either in transit, or soon after, due to injuries sustained from unknown assailants before being rescued, or due to malnutrition and parasite infestations as a result of having been held in previous poor conditions of captivity and treatment. In terms of community engagement in promoting responsible conflict mitigation, 1,588 local community members and government officers have been educated on HOC issues.
The HOCRU project has been supporting the government in their law enforcement efforts for wildlife and ecosystem conservation. Government officials have always accompanied our team on each rescue or confiscation mission for illegally held captive orangutans, so there is close collaboration and mutual capacity building actively in place. Our hope and intention is that we will be able to support government and communities alike to reduce encroachment of farmlands and protect the forests that remain, so that incidences of human-orangutan conflict can be drastically reduced.

- Has long-term monitoring been put in place to ensure the outcomes are sustainable? How will this be funded, undertaken?
  We have conducted orangutan post release monitoring using transect line methods, as a part of HOCRU team activities. We have been planning on more monitoring activities in the form of research activities working with Serge Wich from Liverpool John Moores University as part of our monitoring activities to see the impact of our translocation on orangutan behaviour and their survival skills in a new forest homes. This activity was initially funded by Chester Zoo and currently we are seeking more funds to allow us to conduct monitoring and research activities.

We also expect to have a separate team that will focus on monitoring and verification of orangutan conflict areas as well as forest clearing activities within the Leuser Ecosystem, to be supported by the Forest Trust.

- Please detail how you have/plan to disseminate your results (please include a rough timetable) e.g. giving talks, preparing papers, producing management guidelines, submitting evidence to change government policy, getting media interest, carrying out workshops for conservation officers. Would you like to work with PTES to achieve media coverage for your project? Do you have any plans to publish the findings from your work in journals?
  The OIC is active in highlighting conflict cases through local, national, and the international media in an attempt to widely inform and educate about the need to eliminate illegal orangutan poaching, killing and trafficking. This is also aimed at encouraging authorities to enforce wildlife protection laws as this is considered vital to stop poaching and killing of orangutans. Without law enforcement, the conservation imperative will fail and therefore we will not be able to prevent the extinction of this species.

In October 2012, OIC Founding Director Panut Hadisiswoyo gave a series of talks across the UK, as part of the Spotlight Sumatra campaign from our international partners the Sumatran Orangutan Society. The talks, which heavily featured the work of the HOCRU programme, took place at Oxford Brookes University, Bristol Zoo Gardens, Natural History Museum, Chester Zoo, and Bradford University, with each visit having more than 100 people in attendance. Amongst our other work, Panut highlighted HOCRU’s achievements in resolving human orangutan conflict problems in Sumatra, all of which were well received, with rescue and translocation issues being the main discussion points with the audiences. In February the HOCRU team also hosted a film crew visit from the BBC Natural History Unit for a new series entitled Monsoon. They were interested in covering our

![Figure 17. A film crew from the BBC Natural History Unit filming HOCRU activities](image)
rescue and translocation work, and during their two-week visit they managed to film two incidents, in addition to covering our post-translocation monitoring work, the isolated circumstances which force our team to have to conduct such translocations, and also forest restoration work adjacent to our translocation site.

In terms of media coverage, we have to date had a number of articles in the press:

In September 2013, a film crew from the BBC Natural History back to Sumatra for additional film shots for their new series entitled Monsoon. During their two-week visit they managed to film two incidents, in addition to covering our post-translocation monitoring work, the isolated circumstances which force our team to have to conduct such translocations, and also forest restoration work adjacent to our translocation site. The BBC Monsoon series on the HOCRU programme is scheduled to be aired on BBC TV in 5 October 2014.

Also in September 2013 OIC Founding Director Panut Hadisiswoyo was selected for the GRASP Ian Redmond Conservation Award, on the basis of the HOCRU programme. With this award, the project is more internationally recognized, which will help us in leverage more funding for operational costs, with it being our plan to offer these conservation services for as long as they are necessary. This will be in addition to our working with government and community stakeholders to affect policy changes and help reduce incidents of conflict in the field, with the ultimate goal being a secured future for both people and wildlife.

Two members of the HOCRU team were invited to participate in a human orangutan conflict workshop in East Kalimantan on 11 December 2013. The workshop was sponsored by Indianapolis Zoo (USA) and the Kutai National Park Authority (Indonesia), with attendees including staff from various NGOs and government organisations. At the meeting the HOCRU team was able to discuss their experience in Sumatra and present data on the cases encountered therein.

The veterinarian and team leader of the HOCRU programme in February 2014 traveled to Jersey Zoo in the UK, to attend the 12 week Durrell Endangered Species Management Graduate Certificate (DESMAN) training course, affiliated with the Durrell Wildlife Conservation Trust and the University of Kent. Here Dr. Ricko studied to improve the management and scope of the HOCRU programme, with a subsequent speaking tour also conducted throughout Britain to discuss the programme with the public. After finishing the course, Dr. Ricko joined the Spotlight Sumatra event organised by Sumatran Orangutan Society (SOS) UK. During this event, he gave presentations in Nottingham University, Chester Zoo, Natural History Museum, Liverpool University, and Royal Veterinary College to promote the HOCRU project in Sumatra.

Furthermore, the veterinarian and team leader of the HOCRU programme on 20-27 June 2014 attended the Orangutan Veterinary Advisory Group (OVAG) workshop series conducted in Jogyakarta, Indonesia. Through this workshop, inaugurated in 2009, a group of orangutan veterinarians from all over the world shared their field experiences and expertise in dealing with orangutan health and rescues. After the workshop, these frontline veterinarians returned to their field sites to continue their work of orangutan health care and rescues. Our HOCRU vet has been actively participating in this workshop since 2009 and continues to contribute the conservation of Sumatran Orangutan through dedicating himself for our HOCRU programme.

The Founding Director of the OIC also presented a talk on the HOCRU programme, entitled 'Addressing human orangutan conflict in plantation landscape in Sumatra', at the bi-annual International Primatological Society Congress, in August 2014 in Hanoi, Vietnam. As a follow
up from this conference, together with other speakers showcasing human orangutan conflict issues, we have planned to create a special edition of a scientific journal about orangutans in agro-industrial landscapes, featuring a general summary of what is known and what we still need to know, conservation implications, and general recommendations for managing HOC matters into the future.

- Please give a breakdown of the how you budget was spent compared with the budget in your original application.

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<th>Original PTES budget</th>
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<tr>
<td>4.2. Field communication and coordination</td>
<td>£432</td>
<td>£431</td>
<td>£1</td>
</tr>
<tr>
<td>4.3. SMS centre operational cost (telephone bill)</td>
<td>£84</td>
<td>£89</td>
<td>-£5</td>
</tr>
<tr>
<td>5. Insurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>£1,260</td>
<td>£1,251</td>
<td>£9</td>
</tr>
<tr>
<td>6. Other costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community workshop/mitigation training</td>
<td>£852</td>
<td>£851</td>
<td>£1</td>
</tr>
<tr>
<td>Vaccinations for HOCRU team</td>
<td>£355</td>
<td>£368</td>
<td>-£13</td>
</tr>
</tbody>
</table>

- Have you succeed in raising other funds for the project? If so, this is really good news! Please list the sources and levels of investment

Yes we have succeeded in raising funds for the project such as:
1. Ocean Park Conservation Foundation Hong Kong (OCPFHK): 199,868 HKD
2. EAZA Ape Conservation Fund: 12,000 EURO
3. US Fish and Wildlife Service: 48,348 USD
4. Chester Zoo UK: 4,950 GBP
5. Mohamed bin Zayed Species Conservation Fund: 12,500 USD
6. Orangutan Outreach : 2500 USD
7. Private donation: 3,916GBP

- **What are the best lessons you've learned so far?**

  A great deal of the matter of HOC lies on the understanding and tolerance level of local communities towards orangutans and other wildlife living in and around human landscapes. We have also observed that there is no organised active protection method in place for mitigating or reducing conflict in any of the communities visited. Within this there is space for education, training, and planning, so as to reduce the potential for conflict to occur.

  Therein, one of the most effective ways to prevent HOC\(^1\) is intense awareness and education programme on conflict mitigation for communities adjacent to the areas whereas wildlife conflict commonly occurs. Such activities have resulted in support and increased cooperation with local farmers, whom through their active involvement can significantly reduce problematic or dangerous incidents. This also has the added benefit that these local people have also become a major and oftentimes first source of information about HOC across the region, which facilitates our ability to respond to conflict issues.

  We have also learned that rescuing orangutans isolated from plantation or farmland areas is not a simple task to perform as it risks not only the life of the individual orangutans but also our HOCRU team. This is because the nature of each rescue and which steps will be required are unpredictable and subject to change by the minute, with as one example the height of the tree where each orangutan is located at the time of injecting them with a sedative, and also where the individual moves to after a successful shot. In order to manage and minimise the potential risks, we have been working to refine our methodology and begun seeking technical advice from outside organisations also involved in rescue operations.

  Through the experience earned from the programme’s inception, our team has become a qualified orangutan rescue team that has received international acknowledgement. Because of this none of our rescue or mitigation actions have resulted in any fatalities or even serious injuries – which is indeed to be considered an achievement considering that we have been relocating the most arboreal of the great apes from conflict situations without incident. Towards this we are happy to report that we have been invited to present and share our methods at the upcoming 6\(^th\) East and Southeast Asian Wild Animal Rescue Network Congress, to be held in Hong Kong in November 2014.

- **Please provide a Project conclusion/ summary: (300 words) including objective(s) at outset, lessons learned, recommendations for future practice**

  The HOCRU project has been working to investigate and conduct mitigation of conflict incidents in agricultural areas prone to crop-raiding by orangutans; conduct regular field monitoring of known isolated populations of orangutans, as well as monitoring of orangutans translocated through the HOCRU programme; gather information regarding the types and patterns of HOC experienced by local farmers; and socialize mitigation methods and related concepts to local communities and government representatives so as to reduce the incidence and severity of the problem across the island. We have successfully conducted a number of rescues of orangutans isolated in conflict situations, and assisted the people living adjacent to these areas in mitigating and preventing the effects of conflict upon them. This shows a positive impact on orangutan conservation, as before the HOCRU programme began, the orangutan conflict issues were simply not being addressed by any agencies in the region. The HOCRU programme has been acknowledged by key stakeholders in northern Sumatra as the only conflict mitigation team addressing human-orangutan conflict problems, and thus we have developed strong relationships with local government and communities living in and around this the last stronghold of the Sumatran orangutan. However there is still much to be done towards increasing the practical level of law enforcement by government authorities conducted on the ground. Thus, the HOCRU programme will continue to work to become better integrated into law enforcement efforts, so as to reduce the incidence of HOC and also combat the illegal pet trade in orangutans across northern Sumatra.

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\(^1\)Given the caveat that law enforcement for biodiversity conservation matters in Indonesia has been and remains very weak