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The Successful Conservation Efforts of Friends of the National Parks Foundation's Bali Bird Sanctuary:

A Field Study Assessment

Olivia C. Gilmore, on behalf of FNPF research programme

Nusa Penida, Klungkung Regency, The Republic of Indonesia

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Abstract

The aim of this study is to evaluate, through field observation, as well as primary and secondary source research, the effectiveness of the Friends of the National Parks Foundation's (FNPF's) rehabilitation and release of the critically endangered Bali Starling on the island of Nusa Penida, Republic of Indonesia. Population numbers, general behavior, and nesting preferences of the Bali Starling were recorded in six distinct locations near the Prapat, Ped, and Toyapakeh regions of Nusa Penida. Observations were conducted twice daily, over the course of ten days, for a total of eighty-four observations. All of the birds monitored were either of the sixty-five originally released in 2006 by Friends of the National Parks Foundation, or of the second generation of Bali Starling that have been reproduced in the wild. During field observation it became evident, due to the population density and nesting patterns recorded, that the bird not only possesses higher adaptive qualities than previously believed, but is also successfully reestablishing a stable population on Nusa Penida.

Key Words

Bali Bird Sanctuary; Bali Starling; Community Development; Friends of the National Parks Foundation; Nusa Penida, Indonesia; Reforestation

Introduction

This report is an nonpartisan account of the organization's work, and should provide evidence sufficient to claim that the continuation of their projects are beneficial to the survival of this critically endangered species, as well as to local communities and the environment. It is hoped that this study will increase awareness of Friends of the National Parks Foundation and the Bali Starling, as well as encourage sponsorship from outside organizations and parties. As a not-for-profit, grassroots organization, the foundation's success is hinged upon the contributions of those who care about environmental issues and want to make a difference.

The benefits of saving an endangered species from extinction are innumerable. The United States Congress summarized this concept in the Endangered Species Act of 1973, recognizing that

endangered and threatened species of wildlife and plants "are of aesthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people" (Fish and Wildlife Service). To see the Bali Starling completely eradicated from the wild would be a great loss of beauty and biodiversity to Indonesia and the people of Bali.

Study Area

Nusa Penida is the largest of the three islands of off the southeast coast of Bali, Indonesia. Administratively, it is a sub-district of the Klungkung regency. It is approximately 20,000 ha in size. There are 16 government villages and 35 traditional villages dispersed throughout the island. Its climate is considerably more arid when compared to Bali's average rainfall, and it is characterized by its dramatic limestone cliffs and hilly terrain. On land infrastructure for tourism is minimal to nonexistent, but scuba diving tour groups frequently visit the waters just off of the island's coast, which are considered to be world-class diving sites.

Field study observations were conducted near the Prapat, Ped, and Toyapakeh regions on the northeast portion of the island. Friends of the National Parks Foundation's bird rehabilitation site and tree nursery is in the Bodong banjar (neighborhood) of the Ped village. The organization's main office is in Ubud, Bali.

Friends of the National Parks Foundation

Founded in 1997, Friends of the National Parks Foundation (FNPF or Yayasan Pecinta Taman Nasional), is an Indonesian non-profit, non-governmental organization working to preserve the country's wildlife and habitat for her people and for the world. Unlike many environmental organizations, which can be fettered by narrow-minded conservation practices, FNPF combines land restoration and reforestation, wildlife release and protection, environmental education, and community development to create lasting benefits for wildlife, humans, and the environment. As a small, locally-run organization, FNPF takes a multi-faceted approach to solve environmental problems that stem from multi-faceted causes. This holistic method creates a mutually beneficial ecosystem in regard to

animals and their habitats, and local peoples' social, cultural, and economic well-being. It is evident from the organization's projects that they recognize the intrinsic inter-relatedness of human beings, our fellow creatures, and the environment.

The Foundation's first project was rehabilitating orangutans and their habitat in the Tanjung Putting National Park in Kalimantan, Borneo. In this once incredibly bio-diverse, but now horribly environmentally degraded area of Indonesia, FNPF has made significant strides in the sustainable reforestation of wildlife habitat. Also, their Conservation Education Program has been adopted by the Education Department to be applied in all schools in the regency.

The second working location, and the focus of this study, is on the island of Nusa Penida. Since beginning their reforestation project in 2004, Friends of the National Parks Foundation has made Nusa Penida into an island bird sanctuary. Threatened bird species of Indonesia, which include the Bali Starling, Mitchell Lorikeet, Lesser Sulphur Crested Cockatoo, and the Java Sparrow, are brought to the island, rehabilitated and released into the wild. Prior to release, all birds undergo a series of preparatory activities and specific living conditions to acclimatize them to life in the wild.

On July 10th, 2006, twenty-five micro-chipped birds were released into the wild during a ceremony that involved local villagers, temples, and provincial and local government officials (Begawan Foundation). Within two weeks of their release, several birds had paired up and were observed bringing nesting materials to a variety of nesting locations, already preparing to reproduce in the wild (Begawan Foundation). The Bali Bird Sanctuary project entered its fourth year in the beginning of 2009, and as of August of that year, a total of 65 birds had been released from the captive breeding cages. The birds, which were originally released in just three sites, have now proliferated throughout the island. In addition to the 65 released birds, 62 hatched and fledged chicks have been recorded since the inception of the release program (Begawan Foundation).

In 2005, there were estimated to be less than 10 Bali Starlings left in the wild. Today, over 100 live and breed freely on Nusa Penida. This accomplishment was made possible by FNPF's knowledgeable staff of veterinarians specializing in bird rehabilitation, and constant collaboration with the local people of the island.

In April of 2006, as a result of being approached by FNPF over a period of two years, the Nusa Penida traditional council, which represents 35 villages, unanimously agreed to protect all of the birds on the island, thereby allowing Nusa Penida to be classified as a bird sanctuary (Begawan Foundation). This is the first time in Indonesia that local community members have agreed to actively participate in the protection of released birds. FNPF is unique in its method of utilizing locally established regulations and religious customs to promote wildlife and habitat conservation.

Since the beginning of the project, a symbiotic relationship between FNPF and the communities on Nusa Penida has been established. The local people help to protect the birds with their traditional and ecclesiastical laws, and in return, FNPF plants and gives away thousands of tree saplings, and actively participates in local schools. Villagers can be seen visiting the organization's tree nursery daily, picking up saplings that are both environmentally and economically beneficial to their communities. The locals benefit from the specific properties of each species, whether it is a type of fruit, flower, or hardwood, and FNPF is able to increase the number of trees planted on the island. In local schools, the organization provides environmental education and scholarships to the children of Nusa Penida, who might not otherwise be able to pursue higher education. Community development, when combined with comprehensive reforestation practices to increase wild habitat for the birds, is invaluable in securing the future of the release program.

FNPF's philosophy and projects are highly regarded in many circles. Their work has been recognized and nominated for the Equator Prize and was short-listed for a Whitley Award nomination. In 2003, founder and director Drh I.G.N. Bayu Wirayudha, was nominated for Indonesia's Kalpataru (Hero of the Earth) Award. He was again nominated for the award in 2007.

In order to fully understand the nature of the bird being monitored it was necessary to conduct preliminary research on what is known of the Bali Starling. The following is a succinct description of the bird's appearance, habitat range, behaviors, and population status.

Jalak Bali: The Fauna Symbol of Bali

The Bali Starling, or Rothschild's mynah, is one of the world's rarest birds. It is also relatively new to science, as it was first described in 1912 by the German ornithologist Prof. Dr. Erwin Stresemann (Hirschfeld 202). It is because Sir Rothschild sponsored the expedition that the bird's scientific taxon, *Leucopsar rothschildi*, bears his surname (WAZA). The bird's kingdom, phylum, class, order, family, and genus are: Animalia, Chordata, Aves, Passeriformes, Sturnidae, and *Leucopsar*, respectively (UNEP-WCMC).

This stunning starling, though somewhat elusive by nature, can be easily spotted by its snow-white body and contrasting black-tipped primary and tail feathers. Its other distinguishing feature is the bare, cobalt blue facial skin surrounding the eyes. The feet are gray and the beak is gray to dull yellow with an ivory colored tip. On average, the bird ranges from 22.5 – 25.3 cm in length and from 94 – 116 g in weight (WAZA). Aside from a slightly discernable dissimilarity in crest feathers, 62-75 mm in males and 43-54 mm in females, the species is not sexually dimorphic (WAZA). Unfortunately for the Bali Starling, its striking appearance, combined with the imminence of extinction, has undoubtedly contributed to its demise. The bird's beauty and rarity has made it a lucrative catch for poachers.

The Bali Starling is endemic only to the island of Bali, Indonesia, and formerly ranged across the northwest third of the island. The birds are omnivores, with a diet consisting mainly of insects, worms, seeds, and fruit (*Bristol Zoo Gardens)*. They are also predominately birds of drier terrain, eschewing water save for their infrequent drinking (Victor and Jarvis 50). During the breeding season it prefers fire-induced open shrub, tree and palm-savanna, and closed canopy tropical deciduous forest. In the non-breeding season, birds disperse into open forest, savanna woodland, and, occasionally, in coconut groves near villages (IUCN).

The Rothschild mynah is a social species, congregating in flocks of 20 to 30, except when mating. During the breeding season the birds live in pairs, forming a tight bond with their mate, and become highly territorial (The Phoenix Zoo). In the wild, the birds are almost always either near their partner or with the larger group.

The birds were previously thought to only rely on cavities in trees that had been excavated and vacated by other birds (IUCN). However, this study, in concurrence with observations of the bird done by other parties, has found that on Nusa Penida they will also nest in sugar palm, coconut, and fig trees, as well as unconventional sites such as in the roofs of temples and abandoned bee hives. Yet another discrepancy between the previously upheld description of the birds' behavior and what has been observed on Nusa Penida is the breeding season. It was generally acknowledged that the bird's breeding season was during the months of October and November. However, on Nusa Penida, possibly due to greater food and habitat availability, the bird breeds year round. These adaptations aver the resilience of the Bali Starling, and are hopefully an augury of the birds' successful reintroduction to the wild.

As of the most recent IUCN (International Union for Conservation and Natural Resources) RedList update, the *Leucopsar rothschildi* is listed as Critically Endangered. According to the IUCN RedList, the bird qualifies as such because it has an extremely limited range and a population which is still suffering from illegal poaching for the cage bird trade. It is noted however, that if the population continues to grow and illegal trapping can be brought under control, the species may warrant down-listing in the future. The species has been listed as Critically Endangered for every update since 1994 (IUCN).

In addition to the population numbers mentioned previously on Nusa Penida, as of 2008, it was estimated that there were approximately 50 birds living in the West Bali National Park (IUCN). However, it is uncertain how many of these birds released in the National Park have bred successfully in the wild, therefore making it indeterminable if they can be classified as 'mature individuals' as per IUCN guidelines. According to one European zoo's count, there is a population of approximately 700 Bali Starlings in various zoos around the world (Bristol Zoo Gardens). It is also estimated that there are several hundred more kept illegally as pets and living trophies. However, due to the black market nature of this illegal trade it is impossible to know the exact number of living birds in captivity.

All of the sources utilized for this study, including the founder and staff of FNPF, unanimously agree that the single most detrimental factor to these birds persisting in the wild is illegal poaching.

Other less prominent, but contributing, factors include changes in climate and a reduction of habitat due to the increasing urbanization of Bali. Fortunately, Friends of the National Parks foundation is combating all of these causes simultaneously. First they encourage local people to take an active role in protecting the population from poachers. Then, with collaboration from the community, they plant trees for their extensive reforestation project to increase habitat area and create a micro-climate for the birds.

Materials

Equipment used in this study included a handheld GPS, binoculars, a watch, daily observation sheets and notebook, and a writing utensil. Data sheets were made before each field study. Each site labeled A – F had a separate chart which included the following spaces for information: time of arrival, time of bird spotting, bird count, and notes.

A motorbike was used to travel quickly between the different sites being monitored. Researchers included myself and FNPF staff member Nyoman Anton, who assisted with his extensive knowledge of the birds' range and behavior, as well as serving as a guide and translator.

Methods

The procedure adhered to while conducting this study was simple, yet commensurate to our purpose. The methods of observation were chosen based on the following criteria: the likelihood that the bird would be spotted in a specific site and during a specific time, and the certainty that bird counts were kept as accurate as possible by attempting to eliminate counting the same individuals twice.

The observation sites were chosen based on Anton's and the local people's knowledge of where birds have been consistently spotted. Consequently, these locations were also predominantly nesting sites. The sites varied from a highly trafficked roadside to a temple yard to just outside of small villages and homes. The distance between sites was also taken into consideration. To ensure that the same bird was not counted twice, the observation sites chosen were spaced throughout the Prapat, Ped, and Toyapakeh regions. This ensured that it would be highly unlikely for a bird spotted at

one site to move to another site in the short amount of time it took to traverse between locations on the motorbike. The time was recorded at the arrival to each site and again when the bird(s) was spotted.

It was decided to monitor the birds in the morning and evening of each day because it is during these time frames that the bird is known to be most active, therefore increasing the probability of a spotting.

Observations began each day at approximately 6:30 am and were repeated at 4:00 pm. The first date of recorded observation was September 25, 2010, although several birds were spotted while surveying the island during the two days prior. The last date of recorded observation was October 3, 2010. A total of 84 observations were completed. As previously noted, observations were conducted at six predetermined sites. When one observation session was finished, the next site was immediately moved on to.

Upon arriving to a site, first the time of day was recorded. For the first day of observations the GPS coordinates were also recorded. Since the locations were consistent for each observation, it was unnecessary to record the GPS coordinates for subsequent outings, and a letter A - F was assigned to each location. Next the area was scanned for birds. Both binoculars and the naked eye were used. Typically, the birds were spotted almost immediately after arriving to the site or within 10 to 15 minutes of arrival. If no birds were spotted after approximately 30 minutes of searching, then observation for that location ceased.

As soon as the first bird was spotted the time was recorded. Generally the birds were seen in pairs or groups, warranting just one spotting time. However, in instances where there were several minutes between individual bird sightings more than one time was recorded.

The total number of birds spotted was recorded before leaving each site in the “bird count” column.

Brief notes were taken to describe the general behavior of the birds, the types of nests they were using, if food was being brought to the nest, speculations about the number of offspring, and any other

significant observations. If no remarkable behavior or observations were seen then the notes section was left blank.

Results

It is evident solely from the numbers listed in the data tables [see below] that the Bali Starling can be seen consistently and frequently on the island of Nusa Penida. It should be noted that these observations were only conducted in three small regions, and therefore it can be presumed that the numbers listed here are far below what an actual total population count of the island would be. However, the purpose of this study, as previously noted, was not to acquire a conclusive count of every bird on the island, but to aver that the birds are successfully establishing a stable population after release.

The average difference in time between arriving to a site and spotting a bird is 4.3 minutes. The mode is 0 minutes and the range 16 minutes. These numbers not only indicate how easily the birds can be spotted, but also suggest that the birds have established permanent habitats or nesting sites in which they can consistently be seen.

The average bird count is 1.9. The mode is 2 and the range is 8. This data represents the positive observation that the birds were most often spotted in pairs. The fact that the birds were nearly always seen in pairs or groups on Nusa Penida indicates that they are following the normal breeding and social patters that they exhibit in the wild, and therefore are adapting well after being released.

Seeing the birds in pairs is also a likely indication that the population is mating and reproducing. This hypothesis is bolstered further by the notes describing the nests being used and of the pairs seen bringing food into the nests. In some instances, offspring could be audibly identified when the nests were within close range of observation.

As mentioned previously, both the released Bali Starlings and second generation Bali Starlings on Nusa Penida have developed slightly different nesting habits than what was previously recorded of their native Bali counterparts. At the Tanah Bias site, which was located adjacent to a small compound of homes, it was evident that a pair was nesting in a palm tree trunk, where the crown of

the tree had fallen off and a hollow cavity remained at the top. At the Banjar Nyuh, Dalem Bungkut Temple, Jalan Bodong, and Ped Temple sites the birds seemed to be using old bee hives to nest in. This was most apparent at the Banjar Nyuh and Ped Temple sites where the birds were seen going in and out of the hives with food or nesting material. Chirping noises made by offspring could be heard coming from the bee hive at the Ped Temple before the nest fell. The hives are cylindrical structures, approximately 60 cm long and 20 cm wide, and hang in trees throughout the region. When void of bees, these make convenient homes for the birds. The fact that the birds are able to adapt their habits to a new area is an augury of their success in the wild.

Discussion

Due to Friends of the National Park's Foundation's collaboration with local communities, reforestation, and bird rehabilitation and release, a burgeoning population of Bali Starling is successfully being established on Nusa Penida. These findings may lead to the eventual down-listing of the species, from "Critically Endangered" to "Endangered" or perhaps "Vulnerable", in the future. The fate of the *Leucopsar rothschildi*, the land and forests of Nusa Penida, and the island's communities are intrinsically interlinked. Therefore, in order for any conservation or animal protection efforts to be sustainable, each group must be seen as part of the whole connected ecosystem. FNPF does not just produce immediate, temporary, results in terms of increasing bird numbers. They have created a system which will yield enduring benefits, a sustainable model that can be imitated by environmental organizations in ecosystems around the world. Due to Friends of the National Parks Foundation's efforts, there is still hope for the Bali Starling to persist in the wild.

The evaluation of the effectiveness of the Friends of the National Parks Foundation's rehabilitation and release of the critically endangered Bali Starling on the island of Nusa Penida has proved successful to date. It can be concluded, due to the aforementioned data regarding the birds' numbers, nesting patterns, and consistency in spotting, that the released birds are well adapted to life in the wild, and that the continuation of their project is beneficial to the survival of this critically endangered species, as well as to local communities and the environment.

Tables

Date: 9-25-2010
Morning field study

Site Label	*Local Name*	*GPS Coordinates*	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	Tanah Bias	(confidential)	6:45	6:45	2	Evident that the pair have a nest in the top of a hollowed out palm trunk
B	Banjar Nyuh	(confidential)	6:58	7:06	2	
C	Dalem Bungkut Temple	(confidential)	7:18	7:27	2	
D	Jalan Bodong	(confidential)	7:33	7:39	2	Location very close to high traffic road
E	Ped Temple	(confidential)	7:44	7:45	2	
F	Blabuh	(confidential)	7:53	8:00; 8:09	2	First bird spotted landing on cows head, apparently eating the flies off of it. This location near two grazing areas.

Total morning count: 12

†*In all subsequent data entries it can be assumed that the site letter corresponds with the same location name and approximate GPS coordination.*

Date: 9-25-2010
Evening field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	16:32	16:32	4	Cannot be determined if second pair was "visiting" from another one of our sites
B	16:22	16:23	2	Seen moving closely together from tree to tree
C	16:39	16:46	4	Two distinct pairs
D	16:51	16:51	2	
E	17:13	17:18; 17: 25	2	Nesting in an old bee hive (man-made cylindrical structure hung in tree)
F	16:57	---	---	A lot of human activity, may have deterred them coming within our range of site

Total evening count: 14
Total sightings for 9-25-2010: 26
††*It should be noted that "total sightings", unlike total evening or morning count, does not indicate individual birds*

Date: 9-26-2010
Morning field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*

A	6:46	6:46	2	
B	6:36	6:37	2	Seen moving closely together from tree to tree
C	6:51	6:54	2	Both were perched on the same cow's head
D	7:00	7:00	2	
E	7:15	7:28	1	Spotted bringing food or other material into bee hive nest, suggests there are offspring
F	---	---	---	Did not visit the site due to spotting 5 in an adjacent location

Total morning count: 14

Date: 9-26-2010
Evening field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	15:52	16:01	3	One spotted coming out of hollow palm trunk nest and joined two others in another palm
B	15:40	15:42	2	
C	16:05	16:12	2	Spotted in Kampuak tree
D	16:17	16:17	2	
E	16:22	16:23	1	Spotted bringing food/nesting material into hive, could audibly discern offspring
F	16:33	16:48	2	A lot of human activity, may have deterred them coming within our range of site

Total evening count: 12
Total count for 9-26-2010: 26

Date: 9-27-2010
Morning field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	6:49	6:49	2	
B	6:32	6:34	2	
C	6:55	6:58	2	
D	7:06	7:19	2	
E	7:24	7:25	2	
F	7:38	7:39	6	

Total morning count: 16

Date: 9-27-2010
Evening field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*

A	16:16	16:18	1	
B	16:00	16:04	2	
C	16:24	16:27	2	
D	16:31	16:35	1	
E	16:40	16:46	2	
F	16:52	17:02	1	

Total evening count: 9
Total sightings for 9-27-2010: 25

Date: 9-28-2010
Morning field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	6:46	6:46	1	Spotted flying into hollowed palm nest with food/material
B	6:31	6:32; 6:38	3	
C	6:59	7:00	2	Spotted going into a bee hive (api api)
D	7:10	7:11	2	
E	7:16	7:19	2	The previously spotted bee hive nest was not hanging in tree, found later on ground, nesting material torn out. Speculated that the cause of the fall was environmental and then a predator (feline?) got to the nest.
F	7:38	7:40	2	

Total morning count: 12

Date: 9-28-2010
Evening field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	16:27	16:28	2	Nearly always spotted in palm trees at this site
B	16:09	16:09	2	
C	17:34	---	---	Searched site until 17:04
D	17:06	---	---	Searched site until 17:36
E	17:38	---	---	
F	17:45	---	---	

Total evening count: 4
Total sightings for 9-28-2010: 16

Date: 9-30-2010
Morning field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*

A	8:52	8:52	1	Spotted for the first time on ground
B	7:37	7:46	1	
C	8:44	8:47; 8:49	2	
D	---	---	---	2 spotted in normally unchecked area near site
E	8:02	8:16	2	
F	8:23	8:23; 8:24; 8:36	4	

Total morning count: 12

Date: 9-30-2010
Evening field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	16:20	16:26	2	An easy site for spotting, nothing to obstruct view from palm nest
B	16:05	16:11	2	
C	16:30	16:32	2	
D	16:40	16:40	2	Spotted in a tree adjacent to heavily traveled Jalan Boedong, then the pair landed on a sitting cow's head
E	16:43	---	---	This pair may be seen less frequently due to the absence of their nest
F	17:02	17:10	1	

Total evening count: 9
Total sightings for 9-30-2010: 21

Date: 10-2-2010
Morning field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	7:19	7:26	1	
B	6:57	7:00	2	
C	7:31	7:40	2	
D	7:43	7:46	2	
E	7:53	---	---	
F	8:10	8:10	3	Spotted near an FNPF wooden box nest

Total morning count: 10

Date: 10-2-2010
Evening field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*

A	16:13	16:21	2	Spotted flying into hollowed palm nest with food/material
B	16:03	16:03	2	
C	16:25	16:26	2	
D	16:29	16:29	2	
E	16:34	---	---	Seems likely that the pair may have relocated since their nest fell
F	16:57	16:58	1	

Total evening count: 9
Total sightings for 10-2-2010: 19

Date: 10-3-2010
Morning field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	7:03	7:04	2	
B	6:48	6:56	3	
C	7:08	7:08	4	Four spotted initially together in tree, then two flew off together
D	7:12	7:12	3	
E	7:15	7:15	2	Speculation that the pair relocated may prove to be false
F	7:24	7:25; 7:31	8	Eight was the approximate count, difficult even with binoculars to discern individuals within the large group in trees

Total morning count: 22

Date: 10-3-2010
Evening field study

Site	*Time of Arrival*	*Time of Spotting*	*Bird Count*	*Notes*
A	16:14	16:17	2	
B	16:03	16:05	2	
C	16:23	16:39	1	
D	16:42	16:42	2	
E	16:45	16:46	1	
F	17:01	17:10	2	Approximately 5 more counted upon arriving to FNPF compound, but unsure of their origin. The FNPF offices seem to be a meeting place in the evenings for groups of the birds.

Total evening count: 15
Total sightings for 10-3-2010: 37

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