

TECHNICAL PAPER SERIES

Strengthening Sustainable Management Initiative and Traceability Mechanism for Amazonian Species

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ABSTRACT: The sustainable wildlife trade represents an important avenue for the provision of financial resources to persons with varying economic situations. The Guyana Wildlife Conservation and Management Commission is seeking to strengthen wildlife management while considering the evolving needs of wildlife users across every sector of the value chain (Wildlife Conservation and Management ACT Section 6(1) C, 2016). The trade of psittacines is important to the livelihood of many Guyanese. Therefore, it is crucial that a system of checks and balances be implemented to protect against unsustainable use. It was necessary to identify, through interaction with stakeholders, the strength, weaknesses, opportunities and threats to the wildlife trade in Guyana. This led to the creation of the framework on which the management plan would be built. The general objective is to create guidelines with indicators which would improve monitoring and animal husbandry practices, while considering livelihoods and the species role in the ecosystem. The methodology includes consultations, scientific surveys of abundance and diversity, and strategies for education and awareness. Thus far, the consultations and the surveys have improved our knowledge on the ecology of psittacines and will be used to inform future policies.

KEYWORDS: Conservation, management, monitoring, animal husbandry, consultation, CITES, animal welfare, species, abundance, diversity



Typical blue and yellow macaw habitat located at Mara, lower Berbice River. (Photography Alex Stewart)

The Guyana Wildlife Conservation and Management Commission (GWCMC) is committed to ensuring that people are able to benefit from the commercial use of psittacines while guaranteeing protection for the species during offtake. The project complements the existing framework by the Guyana Wildlife Conservation and Management Commission to provide robust management for parrots and macaws in trade. The project deliverables include information which can achieve the following outcomes:

- Ensuring that psittacines are not threatened by unsustainable use
- Ensuring that stakeholders understand the need for regulation and monitoring
- Documenting information on abundance, distribution, harvesting, transportation and usage.

To achieve these objectives, it is necessary to conduct scientific surveys and stakeholder consultations, create a data base on pets and develop educational materials for users.

The criteria for selection of consultation sites are based on the historical usage of wildlife within communities, the presence of wildlife collectors and whether the consultation would be impactful enough to start formal relationships with communities. The formation of long-term relationships with communities, in the vicinity of wildlife populations, creates opportunities to improve, and in some instances create, monitoring initiatives to strengthen management and traceability (Chase, Lisa , & Lauber , 2010). Moreover, emphasis is also being placed on engaging institutional stakeholders to assess their understanding of their roles as facilitators of the processes involved in the wildlife trade.

Thus far, the consultations covered seven specific areas attracting participation from twenty-two communities, with sixty-eight percent being indigenous villages. At the completion of the consultations, we would cover twelve areas attracting participants from about forty communities and eighteen institutional stakeholders.

Survey

Guyana is an active exporting country of psittacines worldwide. The Convention on International Trade of Endangered species of wild flora and fauna (CITES), regulates the international trade of wildlife by establishing protocols to regulate and protect the species being traded. Parties to CITES are required to conduct non-detriment findings to ensure that exports will not harm their wild populations. Parties may establish export quotas to limit the level of exports. These surveys inform the non-detriment findings which provide a visual matrix to analyze the status of species being traded (CITES, 1979).



Observation of red-billed toucan (*Ramphastos tucanus*) feeding on the fruits of a manicole palm (*Prestoea tenuiramosa*). Photography by Alex Stewart GWCMC.

The survey is a continuation of previous surveys by the GWCMC to ascertain the abundance and distribution of psittacines in Guyana. The survey is producing promising results and has enabled the GWCMC to venture into new areas to assess the status of these important species. The survey follows the point count methodology and will only record birds which can be positively identified. The team composition includes a

local expert and birds are identified based on visual characteristics, vocals and flight patterns. The field data will be placed in the distance software to estimate abundance in the various regions.

Previous interactions with stakeholders identified the need to create an informational guide to educate users on the best practices.

In order to develop this informational booklet, we identified six general areas that would decrease mortality of psittacines during handling. These areas were identified through interactions with the wildlife handlers and focus on their current handling and transportation practices. The areas for consideration are:

- I. Animal welfare at the time of capture
- II. Animal welfare during transportation both domestically and internationally
- III. Animal Handling techniques
- IV. Provision of nutritional care for psittacines
- V. Role of veterinarians in the local and international trade
- VI. Quarantine requirements for twenty (20) most popular importing countries.

Registration of Pets

The project is also unique because it caters for psittacines in the domestic trade. Psittacines have become entwined in Guyanese culture as pets to both coastlanders and indigenous communities. They are sought after because of their ability to memorize and repeat words. These chicks are hand-raised which decreases aggression while making them tame. It is the gentle nature of these hand-raised birds that make them excellent companions. However, this practice is currently unregulated and

contradicts the current closed season for offtake. Moreover, it creates a market for hatchlings, thus serving as a driving factor for the removal of chicks from nests during the closed season for harvesting.

Identifying which species is part of this practice would enable the GWCMC to make targeted decisions. Therefore, the project is timely because it would feed into the new licensing system. There is tracking of psittacines for the international trade from the time of collection until the time of export. Similarly, it is envisaged that the registration system for pets would enhance traceability for psittacines being utilized for the domestic usage.

Methodology

The consultations were designed to be targeted, therefore attracting participation from wildlife trappers, commercial dealers and persons who spend extensive time in forested areas. Participants were invited during pre-consultation visits and by enlisting the assistance of a local counterpart to mobilize participants.

A power point presentation is shown at the consultations and attendees participate in simulation exercises, engagement matrices and brainstorming. These exercises are based concepts that are shown in the presentation which are social considerations, species ecology and welfare and economic considerations. Participants are encouraged to add a financial value to all the aspect associated with planning, harvesting, transporting and caring for the birds. If trappers are aware of how sustainable use could be a tool to decrease investment cost, they would be more likely to adhere to the new guidelines.

Discussion

Thus far, the consultations have been successful in targeting issues which need to be addressed at a national level. The major topics for discussions include sustainability as a tool to maximize returns on wildlife livelihood activities. It was important to highlight how current practices which include poor transport and animal husbandry may give rise to higher investment cost and yield smaller returns. In order to highlight this, participants were asked to consider distance as the ultimate measure to calculate the investment cost to achieve their desired results.

This was followed by discussions on maintaining psittacine populations close to home and highlighted factors which may determine their presence or absence such as feeding grounds, potential nesting sites, and forest type (Mengesha, G, Mamo, & Bekele, 2011).

Mortality during transportation was also examined at the consultations. It was important to highlight this issue is directly related to the international export quota and will affect harvest quotas once it is implemented. Participants were asked to identify risk factors which may lead to mortality of the psittacines after they are captured. The aim of this exercise is to accurately record when the psittacines are harmed, so that management interventions could be specific to address and mitigate this threat. The general objective is to increase survivorship and decrease unnecessary

offtake.



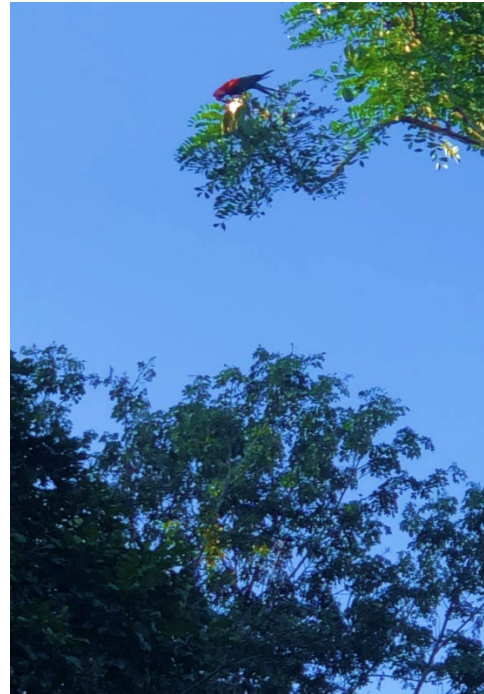
Practical exercise on effect of harvesting during the consultation in Batika, Cuyuni Mazaruni Guyana. Photography Alex Stewart

Additionally, the species ecology has never been extensively described from a traditional knowledge perspective. The consultation has attracted attendance from indigenous people across the country, thereby presenting an opportunity to collect information on their encounters with parrots and macaws. To facilitate this process, questionnaires are used as a tool for data collection. The questions focus on various aspects such as the biological composition of the area, species ecology, current harvesting practices, economic activities and land use. This information was necessary to build a matrix to describe other activities which are associated with harvesting. Our research shows that the trapping of parrots and macaws is often associated with activities such as farming, logging, mining and cabbage palm harvesting.

Moreover, harvesting practices were examined in detail to assess the trapping method and the risk of injuries to the birds. An engagement matrix was used and a plot of risk of injuries against effectiveness was performed. During this exercise the

participants were asked to rate the activities on a scale of one to five. The points were then noted. The graph was divided into four sections and the performance of each of the method was noted. For a method to be considered safe, the points would have to intersect within the category of high effective low risk of injury. During the exercise, justifications were given by the participants about the ratings of the method. A closer examination of these methods revealed that they may be specific to size or species of birds and injuries are often a result of negligence and inexperienced trappers. These results further strengthen the GWCMC's position that guidelines are necessary to improve animal welfare during the offtake processes. It should also be noted that, species diversity, type of trees and water body, feeding preferences, nesting preferences and time of activeness were also examined using this structure.

The field surveys have widened the knowledge of the distribution and abundance of species in the international trade. In comparison to previous surveys, this survey was more specific and focused on the species with previously recoded low figures. This approach will enable the GWCMC to develop the technical skills necessary to make assumptions on species presence based on forest types. It also revealed more information on the species behaviour in the wild. Understanding the niche of these species would enable the GWCMC to accurately determine how actions by indirect users of wildlife habitat can undermine the effectiveness of protection measures.



Red and green macaw (*Ara chloropterus*) feeding on ituri wallaba (*Eperua grandiflora*) during observations in Madhia, Potaro Siparuni, Guyana. Photography by the author.

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Bibliography

Wildlife Conservation and Management
ACT Section 6(1) C. (2016).

Chase, Lisa , & Lauber . (2010).
PARTicipation in Wildlife
Management. Whar do Stakeholders
want? *Society and Natural
Resources* , 629-639.

CITES. (1979). Text of Convention .

Mengesha, G, Mamo, Y., & Bekele, A.
(2011). A comparison of terrestrial
bird community structure in the
undisturbed and disturbed areas of
the Abijata Shalla lakes national
park, Ethiopia. *International Journal
of Biodiversity and Conservation*,
389-404.

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