## Request for Proposals

# Aerial broadcast applications of rodent bait using an uncrewed aerial system (UAS) or helicopter to remove rats.

INVASIVE RAT ERADICATION, SAVANA ISLAND, U.S VIRGIN ISLANDS

CONTACT: JOSE LUIS HERRERA, ISLAND CONSERVATION, JOSE.HERRERA@ISLANDCONSERVATION.ORG

Please submit all proposals and additional documents to Jose Luis Herrera. Proposals will be accepted until a selection is made.

### Summary

Island Conservation (IC) is seeking the services of a company that can aerially distribute bait pellets to target invasive rats on Savana Island, the U.S Virgin Islands in the Caribbean, to recover and protect biodiversity. For a UAS operation, IC seeks a company that can supply and pilot a UAS or UAS equipped with a dispersal system capable of evenly distributing bait pellets. For a helicopter operation, IC seeks a company that can supply a pilot, helicopter and associated equipment (but not spreader buckets) needed to evenly distribute bait pellets. The project comprises two aerial bait broadcast applications covering ~ 72ha. Island Conservation will consider proposals for the entire project scope as described herein. The operational window for bait applications is March – April 2025.

## Background

Island Conservation is a science-based nonprofit conservation organization committed to protecting island species and ecosystems. Island Conservation's mission is to prevent extinctions by removing invasive species from islands. In 2019, Island Conservation completed the world's first rat eradication using UAS in the Galapagos, and since then an additional four eradication projects have been completed by UAS. All these projects were implemented successfully and demonstrated a strong proof of concept. Our goal is to replicate the use of this technology to increase the scope, scale, and efficiency of rat eradication on islands around the globe and be the first UAS-based rodent eradication in the United States.

We are in the planning stages of a project to remove invasive rats from Savana Island. Savana is one of the islands within the Puerto Rico Geographic Bank to serve as a refuge to introduce a population of the Endangered Virgin Islands Tree Boa (VI boa). However, invasive rats are one of the major threats to the VI boa, predating juveniles, and adults. By eliminating invasive rats from Savana Island, we will create a safe refuge for a new population of the VI boa, contribute with the delisting criteria for the species



recovery, build additional capacity within local partners for similar projects in the region, and demonstrate that drones can be safely used in the U.S. to manage or eradicate invasive species.

Island Conservation is partnering with the Division of Fish and Wildlife in the Department of Planning and Natural Resources from the U.S Virgin Islands (DPNR-DFW) to plan and execute the removal of rats from Savana Island. Rats must be removed using aerial bait dispersal due to the size of the island and challenging terrain.

For the size of Savana Island, it would typically require the use of a helicopter with an underslung bait spreader bucket to apply bait. However, having the proven technology of the UASs to broadcast bait and remove rats, we are interested in considering both options (i.e. helicopter and UAS) and decide which would be the more feasible and cost-efficient for the project. We are looking to work with a company that can provide either UASs or a helicopter technology, develop custom bait spreaders, and operate the aircrafts to apply the rodenticide product with the proper protocols to successfully complete the eradication project.

#### How are rats typically eradicated from islands?

Rats are typically removed from islands using a highly palatable cereal grain-based bait containing a rodenticide. Bait can be applied in bait stations, dispersed by hand, or applied aerially. Aerial broadcast operations use specialized spreader systems to sow bait across an island and GPS-guided flight to ensure accurate coverage. Generally, the entire island area is treated twice in two applications, separated by a period. In tropical environments, a gap between applications allows time for any sub-dominant or juvenile rats to access bait once most of the population is gone.

One of the essential parts of a broadcast application is ensuring every rodent on the island has access to a lethal dose of the toxicant (a single bait pellet). To ensure this, we determine the appropriate application rate in kilograms of bait per hectare of land area in advance of the operation. Then we follow good practice guidelines for baiting that have proven successful in more than 600 rodent eradication operations. The aerial bait application is completed by flying straight parallel flight lines across the interior of the island with bait broadcast in both directions out of the bait spreader. Then the coastal perimeter is treated by flying the actual coastline while spreading out of only one side of the spreader bucket to avoid bait getting into the water. GPS data collected during the operation will allow eradication managers to monitor bait coverage and density on the ground in real-time.

#### The Project Site

Savana Island is located approximately 2 to 3 miles west of St. Thomas Island in the U.S. Virgin Islands. Savana Island is a small uninhabited island (72 ha or 178 ac) with no man-made structures designated by the U.S Virgin Islands Government as a wildlife Sanctuary that is managed by DPNR-DFW (Figure 1). The island was identified by Federal and State government agencies and other subject-matter experts as one of the best offshore islands to establish a highly resilient VI boa population. As a wildlife refuge, Savana is intended to protect and conserve wildlife, plants, and endangered species for the U.S. Virgin Islands.

The maximum elevation in Savana is approx. 80m and the island is vegetated with a canopy not

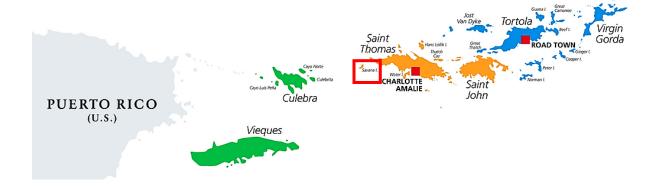


exceeding 20 m in height (Figure 2). Access to the island is by small boat and the bait loading for aerial applications of rodent bait will likely occur from an offshore barge or floating deck. The operation of the UAS will be conducted under professional guidance and coordination with the onsite safety manager.



## VIRGIN ISLANDS





**Figure 1**. Location of U.S Virgin Islands in the Caribbean (blue square) and Savana Island in the U.S Virgin Islands (red square).





Figure 2. Savana Island topography

#### Project management

The planning and management of the overall eradication operation will be led by Island Conservation and DPNR-DFW. Island Conservation will also provide experienced staff and institutional knowledge of eradication operations, including GIS and aerial baiting expertise. DPNR-DFW is the project lead and has the final decision-making authority over the project.

During the baiting operation in Savana, Island Conservation will oversee the overall eradication project implementation and evaluate bait application progress. The UAS or helicopter team will manage the aerial operations.

Specifications for the Proposed Operation	<b>Specifications</b>	for the	Proposed	Operation
---	-----------------------	---------	----------	-----------

Operational area*	1 site ~72ha (178 acres)
Scheduled operational timing	March/April 2025
Max island elevation	~ 80 meters (262 feet)
Bait type	Conservation 25D, manufactured by Bell Laboratories
Bait specs	Cylindrical pellets; Diameter = 13mm (½"); Length ~13mm (½") Mass
	~2.3 gram; 0.08oz
Bait application rate on the	30 kg/ha (~26.76 lb/acre)
ground	
Bait application rate out of the	Between 5 and 15 kg/ha (4.5 and 13.5 lbs/acre)
bucket	
Number of applications	2
Interval between applications	21 days (minimum)
Coastal perimeter rate	30 kg/ha (~26.76 lb/acre)
Total bait to be applied**	6,703 kg (14,777.6 lb)



Accommodation	The aerial operations team will generally be accommodated on the
	main island of St. Thomas, but during the baiting operations may be
	camping on Savana.
Access to the island	Small and medium boats (<10m) will be used to move personnel,
	supplies, and equipment for the aerial operations between St.
	Thomas and Savana.
Operational landing and bait	If a UAS is used, it is expected that bait-loading sites can be
loading sites	established on an offshore barge or floating deck away from Savana
	in the range of 0.5 km. If a helicopter is used, the load site could be
	either in Savana or the nearest point in St. Thomas (approximately 7
	miles ferry distance).
Refueling or recharging	For UAS, both 91 and 98-octane (gasoline) can be sourced locally.
	Gas-powered generators suitable for recharging LiPo batteries will
	be provided by IC and sourced locally if available or shipped. It is the
	responsibility of the UAV operator to provide requirements for
	refueling and recharging necessary to complete daily operations
	without interruption, inclusive of spares, as the project is intended
	to be self-supported.
	For helicopters, Jet A1 fuel will be utilized, and IC will provide all
	necessary fuel. If the fueling is at the loading site, the company or
	bidder will be responsible for all the fuel testing and handling onsite.
Constraints	Rainfall, wind speed, sea conditions, international travel.

\*This area was calculated from 3D surfaces. Actual application areas will be determined using the threedimensional surface area calculated using the DSM.

## Scope of Work

The objective of this project is to eradicate rats from Savana Island by the aerial broadcast application of bait using UASs or a helicopter. The Services required encompass the following. Island Conservation will only consider proposals for the entire scope. All proposals must supply information on how the following will be achieved.

#### For UAS:

#### 1. Demonstrated UAS Platform

Supply at least one UAS (with an appropriate back up system or complete set of spare parts) that meets the minimum following specifications. The proposal must state how an existing platform can meet these requirements or the steps necessary to modify a platform to achieve them.

- a) Can reliably take off, land, and maneuver when carrying payloads of at least 10kg (22lbs).
- b) A flight distance at a maximum payload of 2.5 km.
- c) Demonstrated flight reliability and maintenance schedule.
- d) Equipped with mission planning software that is easily programmable in the field and does not rely on a connection to Wi-Fi or cell network.
- e) Capable of programmable autonomous navigation with precision payload triggering. Mission flights should be completely autonomous, with exceptions for take-off and landing.



- f) Able to autonomously fly along a boundary at a consistent speed based on preprogrammed flight lines derived from aerial Orthomosaic and DSM imagery.
- g) Capable of spreading a minimum of 500kg of bait per day using pre-programmed flight with the ability to adjust flight speed and flight line spacing. Triggering of the bait spreader should be done autonomously when the target area is reached.
- h) Ability to record flight lines of the exact area treated, including start time, end time, speed, distance covered and total surface area covered by swath width.
- i) Ability to export flight line data of area treated in the field to facilitate real-time monitoring of application progress.
- j) Can be refueled or batteries switched out within 120 seconds.
- k) Can operate continuously for a 10–12-hour period over multiple consecutive days without significant stand down periods for maintenance.
- I) Has an FPV system capable of monitoring bait flow allowing the pilot and ground team to confirm in real-time that bait is either flowing or not flowing out of the hopper.

#### 2. Bait Spreading System

The bait spreader is an essential component of the aerial eradication. The spreader has a mechanical gate either controlled autonomously or manually by the pilot; once opened, bait pellets flow downwards from a hopper through a tube or funnel into a mechanical rotary spinner. As the pellets flow through the spinner, they are 'thrown out'. The swath the pellets cover must be uniform and achieve an even application rate. The application rate can be changed by speeding up or slowing down the aircraft, or by physically adjusting the flow rate which can be adjusted by changing the aperture of the opening into the spinner. When treating the coast or other sensitive areas, a directional swath is required, this can be achieved by blocking or deflecting the flow of pellets in one direction.

The bait spreader designed and used for this project must meet the following criteria:

- a) Demonstrated as compatible and proven with the supplied UAS (s).
- b) Spread pellet sizes between 2-3 grams out of the bucket with a swath width of 10 meters (5 meters on each side) or greater.
- c) Spread bait uniformly across the entire swath at our desired rate. (between 5 kg/ha and 15 kg/ha).
- d) Demonstrates the ability to control the application rate during bait calibration in increments of 2 kg/ha or less for target rates.
- e) Readily modifiable in the field to broadcast bait directionally i.e. from only one side of the spreader in an arc of 120° to 180°.
- f) Demonstrate a rapid, reliable, and straightforward method of refilling bait, and when fitted to the UAS, it can be refilled from empty within 120 seconds.
- g) Can operate continuously for a 10–12-hour period over multiple consecutive days without significant stand down periods for maintenance.
- h) Capable of quick field repairs including two complete sets of spare parts.
- i) Has a live-feed monitoring system to validate bait flow.
- j) Bait is protected from fuel contamination.
- k) Bait flow is controlled, and bait is only released from the hopper over selected baiting areas, not during ferry times, etc.



#### 3. Calibration Trial

Conduct a calibration trial at least four months prior to project implementation, i.e. by the end of November 2024. The calibration trial will use a non-toxic bait and be conducted in a large open level area (ideally short grass, dirt, asphalt, gravel, or sand) where bait can be readily located and picked up. The minimum size of the area should be 10m x 80m. The calibration trial will be used to verify the following:

- a) The UAS (s) minimum specifications above.
- b) Bait Spreading System specifications above.

#### 4. Demonstrations flights

Prior to the calibration trial, conduct flights of demonstration simulating an operation where include a simulated coastline, getting shapefiles for GIS analysis and test of electrical and mechanical systems.

#### 5. Mapping

Island Conservation will provide drone collected orthomosaic and DSM imagery (10cm GSD resolution or better) for planning purposes. Vendors are required to identify any additional imagery or terrain data necessary to complete pre-programmed flight over the treatment area. **Proposals should include what data are required and how data will be collected immediately prior to the bait application.** Once acquired, any data must be processed within a 48-hour period so that it can be used to program the UAS (s).

#### 6. Regulatory Approvals

Lead submission of documentation necessary to secure compliance, permits, and exemptions with national aviation authorities for the distribution of pesticides via UAS in the U.S Virgin Islands.

## Proposals should state current experience in securing regulatory approvals for UAS operations in the United States.

#### 7. Input to Operational Planning

Provide input to operational planning documents prepared by Island Conservation and DPNR-DFW, contributing to the following planning elements.

- a) Regulatory approvals.
- b) UAS shipping and transport.
- c) Required equipment.
- d) Load site selection and specifications.
- e) Design of aerial bait strategy.
- f) Local logistics.
- g) Quality control and data management.
- h) Safety.



Participate in Island Conservation operational plan peer-review and operational readiness check meetings.

#### 8. Shipping

Take responsibility for organizing and undertaking shipping to ensure that UAS (s)/helicopter and associated equipment arrive in St. Thomas at least two weeks ahead of operations are due to proceed. Island Conservation and project partners will be available as a resource for information and shipping contacts.

#### 9. Aerial Bait Application

Travel to St. Thomas and, under the direction of and with the support of Island Conservation and DPNR-DFW, execute aerial bating operations, which will include two complete applications of ~2,722 kg each, approximately three weeks apart. Ideally, each island-wide bait application across Savana (~72 ha) would be completed in a maximum of 3-4 days. Aerial bait applications must follow the operational plan.

Proposals must provide an overview of how the proposed platforms will apply a total of ~5,444 kg of bait over Savana Island (~72 ha) in a maximum of 3-4 days (per each island-wide application) at an application rate of 30 kg/ha.

#### 10. Reporting

Provide a post-operational report that details the following elements:

- a) Lessons learned.
- b) Regulatory approvals.
- c) UAS/ helicopter shipping and transport.
- d) Required equipment.
- e) Load site selection and specifications.
- f) Aerial bait spread.
- g) Local logistics.
- h) Quality control and data management.
- i) Safety.

#### For Helicopter:

#### 1. Operational Details

In the event Island Conservation utilizes a helicopter, the bait will be broadcast from a specialized spreader bucket slung beneath the helicopter. The helicopter will be guided by GPS to ensure uniform bait coverage. The bait to be used in the operation is a cereal-grain pellet containing the rodenticide brodifacoum (25D ppm). The bait will be applied over Savana Island in two complete island applications with at least 21-day interval between March-April 2025.



The helicopter will be required to position from its originating location to a predetermined storage location (Cyril E. King International Airport) in the south of St. Thomas, where it will be based for the duration of the project.

An estimated 1 ton of equipment and supplies will be transported by external sling load from St. Thomas to Savana Island. (See appendices for maps and photos).

During December 2024 and January 2025, the broadcast helicopter will be required for the installation and testing of all key equipment, including the GPS, for functionality and accuracy. At the same time, a calibration trial will be conducted using a non-toxic bait and be conducted in a large open level area (ideally short grass, dirt, asphalt, gravel, or sand) where bait can be readily located and picked up. The minimum size of the area should be 10m x 80m. The calibration trial will be used to verify the following:

- a) The helicopter minimum specifications above.
- b) Bait Spreading System specifications above.

Although the bait loading site is still to be determined, it is estimated that approximately 20-30 total flight hours will be flown for the project.

It is planned that the project will be completed within a 40-day window, allowing for anticipated weather contingencies. Helicopter availability is thus anticipated to be 20-30 days.

Due to the specialized nature of the project, the pilot must have experience in aerial application with a spreader bucket for an island eradication project. This will require the selected vendor to allow nonemployee pilots to fly the contract if necessary. The selected vendor will have the right to fully review pilot experience, interview the pilot(s), and conduct check-flights to ensure selected pilots meet their company standards. Island Conservation will be responsible for ensuring that international subcontractor(s) are legally able to reside and work in the United States, and are correctly licensed, rated, and certified to perform their specific roles.

A licensed A & P Mechanic must be on site throughout the project.

#### 2. Company Requirements

- Hold a current FAA Part 137 Agricultural aircraft operator certificate endorsed for dispensing of economic poisons.
- Hold a current FAA Part 133 (Class B) External load certificate.
- Experience in supporting aerial baiting, forestry fertilizing, and/ or agricultural spraying operations, including the handling of agricultural or forestry pesticides, fertilizers or poisons.
- Minimum of 2 years' experience operating & maintaining the selected helicopter model/s for the project.
- Able to supply a licensed & experienced A & P Mechanic onsite to service helicopters.
- Able to undergo a 1-day audit at the company's nominated base prior to be awarded the contract.
- If awarded the contract, a staff member will be appointed as a contract liaison.



#### 3. A&P Mechanic Requirements

- Must have a current FAA Mechanics License with the necessary airframe and power plant ratings to cover the nominated helicopter models.
- Have a minimum of 2 years' experience maintaining the selected model/s of helicopter being offered.

#### 4. Helicopter Requirements

- The helicopter must have a minimum external useful load capability of greater than 1000 lbs.
- Fitted and certified for Part 133 (Class B) external load operations.
  - Fitted with an external hook and capable of attaching the bait spreader buckets supplied by Island Conservation.-
- The helicopter will need to be fitted and certified to meet FAA requirements, with a TracMap Flight GPS, or equivalent light bar, graphical screen display, cyclic switch, loom, and GPS receiver. (See Appendix for diagram) Capable of recording full swath and half swath (directional broadcast) bait application.
- Equipped with certified Personnel Flotation Devices (PFD), Emergency Locator Transmitter (ELT), Emergency Flotation Systems (EFS) and survival kit. As required to meet Federal Aviation Regulations
- Available flight hours to complete the estimated flight hours for the project without having to undergo heavy maintenance on site, other than normal scheduled servicing or breakdowns.
- Fitted with a VHF radio (132-175 MHz), to communicate with ground crews.
- Fitted with a digital hour meter.
- Capable of being refueled from 55-gallon drums.

#### 5. Alternate configurations

Alternate configurations of helicopter and bait distribution equipment will be considered, provided they can meet the fundamental needs for evenly distributing bait across islands and shorelines, track bait distribution, and other operational details. Contact Jose Luis Herrerra (contact information below) to discuss any details specific to alternate configurations. In addition, alternate operational details such as load sites will be evaluated if they can still fulfill operational needs.

#### 6. Key Equipment

The operation is heavily dependent on role equipment, part of which will be provided by Island Conservation and the remainder by the bidder.

#### Key equipment to be provided by Island Conservation

#### Bait spreader buckets

Spreader buckets specifically designed for the broadcast of pellet bait will be supplied for the project. These buckets were designed and built by Helicopters Otago, New Zealand. The empty weight of the bucket under hook is ~300lbs with a total internal bait capacity of 727 lb. Six- or nine-meter rope strops



are used to attach the bucket to the helicopter via a spreader bar with attachments for N/S and E/W oriented belly hooks. Twenty-four (24) volts from the helicopter power the buckets onboard the compressor and an air-ram that controls the hopper gate via a cyclic on/off switch. The cyclic switch must also be wired to the GPS for bait broadcast start/stop points to be logged into the GPS. The installation of the cyclic switch connection may require FAA 337 certification. The helicopter vendor is responsible for ensuring all FAA certification requirements are met. See photos in Appendix 3.

#### GPS guidance (GPS)

GPS flight guidance is mandatory for aerial bait broadcast. The bidder will be responsible for installation of GPS and for any FAA required certification of the selected GPS guidance system.

#### Laptop computers with GIS software and plotters

These will be supplied for downloading GPS flight-line data and printing flight paths. Island Conservation will also supply at least 1 GIS technician for the operation. Their main role will be importing and mapping data from the baiting flight lines to monitor the application coverage. They will also provide pilots with the boundaries for each baiting block flown and any no-fly zones. Island Conservation will provide Savana Island digital map-data and high-resolution digital satellite imagery.

#### VHF hand-held radios with chargers

Radio communications for ground-to-air and vice versa will be via Air Band VHF hand-held radios. A hand-held radio will be supplied to the site supervisor at any designated external load pickup or drop-off location, as well as the bait-loading sites.

#### Key equipment to be provided by the bidder.

#### External load role equipment

Certified external load role equipment for the operation includes:

• 1x 50-100ft long-line with remote hook

#### 7. Jet A1 Fueling

The project will be considered as "Dry Hire", Island Conservation will provide all necessary fuel. Fueling at the loading sites will be facilitated through Island Conservation. The bidder will be responsible for all fuel testing and handling onsite.

#### 8. Helicopter Servicing

The bidder will be responsible for providing all equipment required to maintain the helicopter during the project, including, but not limited to ladders, floodlights, tooling and wash down/decontamination supplies, aircraft auxiliary power unit, etc.

#### 9. FEDERAL/STATE LAWS & REGULATORY COMPLIANCE

The winning bidder will always comply with all Federal and U.S Virgin Islands Laws & Regulations affecting or relating to the land where the operation is being carried out and affecting or relating to the operation itself. They must be familiar with and comply in every respect with the following, but not limited to: Federal Aviation Administration, FAR's & CFR's, Federal Insecticide, Fungicide, and



Rodenticide Act, U.S Virgin Islands Pesticide-related laws, and the National Environmental Policy Act. They must also comply with all laws and acts while flying over or on any State or Federal Park or Refuge.

#### **10. SAFETY and EMERGENCY RESPONSE PLAN**

The successful bidder will be required to develop a helicopter safety plan, including bird strike protocol, and cooperatively prepare a comprehensive emergency response plan covering all aspects of the work, which will be submitted for approval prior to the start of the project.

The emergency plan should include, but not be limited to, the following:

- Nominate a person responsible and accountable on site.
- Method for dealing with emergencies.
- Method of reporting incidents and accidents.

#### **11. INSURANCES**

The selected bidder shall indemnify and hold harmless Island Conservation and its partners from and against any and all liability, loss or damage arising out of or related to the operation of the aircraft.

The selected bidder shall obtain and maintain throughout the term of any agreement between Island Conservation and the bidder a comprehensive policy of insurance, including, without limitation, coverage for third-party liability, in a form and with liability limits as are customary for similar aircraft but in no event less than that which may be required by any governmental agencies or regulations applicable to the aircraft.

The bidder shall require its insurance carrier to provide Island Conservation with evidence of insurance coverage prior to the commencement of services under any agreement between Island Conservation and the bidder. The bidder shall require its insurance carrier to provide Island Conservation with notice of any change in insurance coverage during the term of any agreement between Island Conservation and the bidder.

## Budget

Island Conservation is a nonprofit charitable organization incorporated in the state of California; our fundraising goals are to match the cost of completing the project. We are always interested in collaborative opportunities to reduce costs while benefiting all parties. This project offers a chance to establish a precedent to implement the method of the aerial broadcast applications of bait to eradicate rats for first time in the U.S Virgin Islands; and create marketing material to continue promoting the invasive species management on the U.S territories.

- All travel to St. Thomas and Savana, shipping and accommodation will be covered at actual cost.
- Payment schedules and other fiscal considerations are negotiable.
- Proposals involving third party investors, donors, collaborators to mutual benefit consistent with the project mission and our not-for-profit business model are welcomed and encouraged.



DATE	MILESTONE
April 19, 2024	Review of proposals by IC
June 28, 2024	Proposal is selected
October 31, 2024	Contract signed
December 15, 2024	Flight performance demonstration
January 15, 2025	Aerial bait calibration is completed
January 31, 2025	Input to Operational Planning
February 14, 2025	Readiness check
March 10, 2025	Aircraft and associated equipment arrive in St. Thomas
March 11-24, 2025	Aerial mapping window
March 24-April 30, 2025	Aerial baiting operational window
May 30, 2025	Operational reporting, close-out contract

## Project Schedule (subject to change)

## Selection Criteria

The criteria that we will use to evaluate proposals are set out in order of importance below.

#### **Desirable Qualifications:**

- **1.** Federal Aviation Agency (FAA) Certifications: The selected company must hold the following FAA certifications:
  - a. 14 CFR Part 135 (Air Carrier and Operator Certification)
  - b. 14 CFR Part 133 (Rotor External Load Operators)
  - c. 14 CFR Part 137 (Dispensing Chemicals and Agricultural Products)\*

\* Island Conservation is willing to support the application and submission of the 14 CFR Part 137 for the company selected.

- 2. Skills and experience: The successful proposal must provide evidence that the company has the necessary skill and expertise to provide and operate the appropriate aircraft and bait spreading systems. The proposal must demonstrate that the company will be able to spread bait reliably and accurately over the island. Considerations will be made of the:
  - a. Relevant projects and experience of the company and pilots
  - b. Availability to provide backup pilots.
  - c. Experience applying for regulatory permits in the United States.
- **3. Capacity:** The successful proposal must provide evidence that they can complete two bait applications on a 21-day interval, as described above, between March and April, 2025. Considerations will be made of the:
  - a. Number, lift capacity, and reliability of the UAS or helicopter
  - b. Design, functionality, and capacity of the bait spreader bucket system
  - c. Demonstration of efficient bait loading
  - d. Reliability of the GPS autopilot system with autonomous baiting
  - e. Availability of backup UASs or helicopters and equipment.



- 4. Replicability and catalytic potential: Island Conservation has aligned its resources to innovate to increase the global scale, scope, and pace of island invasive species eradication. We are only one of dozens of practitioners doing this work globally. But we are the world's only global not-for-profit whose sole mission is to do this work. We aim to help shape the market, tools, and technology available to reduce costs and risks associated with this work while increasing efficiencies. Proposals demonstrating the potential for replication, scaling, or otherwise catalyzing the aerial broadcast applications of bait for the invasive species management market will score best in these criteria.
- 5. Price: Proposals will also be appraised on their financial competitiveness.

### **Requirements for Proposals**

- 1. If considering developing a proposal for this project, please notify the point of contact immediately so that any relevant information can be shared if necessary.
- 2. Please use the accompanying RFP response form as the basis for your proposal (see Form).
- 3. The response form ideally should be converted to PDF format prior to submission.
- 4. If you have descriptions or case studies of similar or relevant projects, please include these as supporting information.
- 5. Feel free to include letters of reference, reviews, and other testimonials vouching for your company's skills and experience.
- 6. Clarify if you are planning to outsource a component of the work and name all subcontractors.
- 7. Proposals must be submitted by email to Island Conservation's point of contact by the deadline identified below.
- 8. Submissions must be identified in the subject line that it is a proposal for the Savana Rat Eradication Project.
- 9. If there are any related business relationships or conflicts of interest, please identify them.

## Questions for Island Conservation

Questions about the project, proposal, or Island Conservation are welcome. Please send all questions to the point of contact listed below. All questions and responses will be communicated to all parties known to be developing a proposal.

## Deadline for Proposals and Review Process

- Evaluation of proposals will begin April 19, 2024, but proposals will be accepted until a selection is made.
- Contract negotiation and signing completed: October 31, 2024



• Proposals received after the deadline will not be considered unless it can be shown that the proposal was submitted late due to factors beyond the company's control.

## Acceptance of Proposal

Island Conservation will notify the party upon acceptance of a proposal via email. All submitting parties will be notified when a proposal has been accepted. If no proposal is accepted within a month of closing the deadline, each submitting party will be notified by email whether their proposal is or is not still under consideration.

## Point of Contact

All proposals and questions should be directed to the contact below:

#### Jose Luis Herrera

Project Manager – Island Conservation Email: jose.herrera@islandconservation.org Mobile: +1 787 672.3303

APPENDIX 1. Red square showing Savana Island location and yellow square showing the Cyril E. King International Airport. The distance is 6 miles between each other.



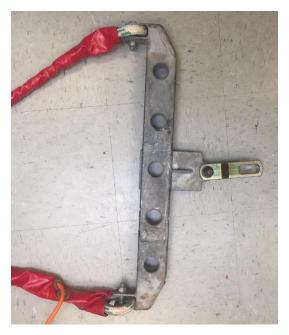


APPENDIX 2. Savana Island - aerial image taken in 2023





#### **APPENDIX 3. Spreader Buckets and Key Equipment**



Spreader bar with E/W Hook



<u>The buckets are designed for a Bell 206 Jet Ranger but are compatible across most</u> <u>makes/models. They weigh ~300Lbs and have a carrying capacity of about 330 kg (728 lbs).</u>



