Amazon.ia

Inteligencia Ambiental

Job Description: Program Manager

[Versión en español abajo / Versão em português abaixo]

Amazon.ia: Inteligencia Ambiental, the working name for a multi-partner initiative to produce timely, actionable intelligence on biodiversity that drives effective conservation and restoration across the Amazon, is seeking a **Program Manager**. The Program Manager is a coordinator of the Amazon.ia initiative, reporting to the Steering Committee, and a facilitator of the initiative's working groups and Partnership Forum. The successful candidate will have demonstrable experience coordinating successful multinational coalitions and expertise in biodiversity monitoring, with strong knowledge of conservation technologies and/or modeling techniques. We are seeking a dynamic and flexible partner to help guide the initiative; someone who builds strong collaborations, understanding the need for both flexibility and alignment; an organizational maven, who takes pride in tracking progress and impact across many activities, tasks, and contributors.

The Program Manager will have regular support and engagement from leaders in Amazon.ia partner organizations, from biological field stations and national biodiversity research institutes, to national and international NGOs; from resourcing partners, including funders and tech companies; and from research teams in academia and in the field. Housed at a partner institution for the initiative, the Program Manager will be a part of the institution and able to draw on its team, as well as a central player in the initiative, and able to call on members of the Partnership Forum, Steering Committee, and Advisory Group as needed.

The Program Manager begins as a 4-year arrangement, where the position will be reviewed and renewed on an annual basis.

Location:

Applicants must be eligible to work and live in one of the following countries: Colombia, Brazil, Ecuador, Peru, or Bolivia. The applicant will be hired by a host institution with a mission focused on biodiversity conservation or science in one of these countries. The host institution will be identified as part of the selection process of a successful candidate by the Amazon.ia Steering Committee.

Roles and responsibilities:

Strategy, Planning, and Governance

- Drawing on the vision and strategy for Amazon.ia (see the initial concept note at the end of the PDF), co-develop with the Steering Committee annual work plans, budgets, and roadmaps
- Report on progress and milestones to the Steering Committee, and serve as its secretary; raise issues early and help troubleshoot and adaptively manage roadmap
- Help facilitate and contribute to Advisory Group meetings and reports
- Support engagement with national and subnational government agencies to align Amazon.ia outputs with policy and institutional needs

Partnership Coordination and Communication

- Facilitate regular meetings of the Partnership Forum, working groups, and task forces; ensure high-quality note-taking, synthesis, and follow-up
- Streamline communication among working groups to ensure alignment and collaboration
- Coordinate initiative communications across partners and support external communications in collaboration with partner institutions
- Proactively assess the landscape of relevant institutions and initiatives, and support engagement with prospective partners to expand and strengthen Amazon.ia
- In collaboration with host sites and institutions, co-develop onsite workshops as needed for initiative goals
- Conduct site visits as needed to coordinate and manage the initiative's activities

Monitoring, Reporting, and Knowledge Management

- Track progress toward milestones and outcomes under work plans and roadmaps for the overall initiative, and in collaboration with initiative working groups
- Support timely and effective reporting from Amazon.ia partner institutions to Andes Amazon Fund, identifying key stories and statistics
- Ensure effective knowledge management for the initiative through documentation and organization of key Amazon.ia protocols, standards, and decisions

External Representation and Resource Mobilization

- Support fundraising efforts by preparing materials, coordinating inputs, and engaging with funders as needed
- Represent the initiative in public and scientific fora

- Work across departments and teams within the host institution to support communications, reporting, contracts, and logistics, as needed

Qualifications:

- Master's Degree in conservation science, quantitative ecology, biology or related field (PhD preferred)
- At least 5 years of program management experience; preference for demonstrated experience managing multiple complex projects, with careful attention to detail
- Demonstrated experience coordinating coalitions or partnerships across sectors, including NGOs, academia, philanthropy, and/or the private sector; strong preference for experience with multinational efforts
- Familiarity with the landscape of institutions working on conservation in the Amazon and in Latin America
- Strong knowledge of conservation technologies for monitoring biodiversity in the field, such as camera traps, passive acoustic monitoring, or eDNA; preference for direct use experience
- Strong written and verbal communication in English and Spanish or Portuguese, ideally all three
- Ability to build relationships across sectors, cultures, and languages
- Flexibility to work independently and as a member of a distributed team in a dynamic start-up environment that is fast evolving
- Located in an Amazon basin country
- Willingness to travel, particularly to field sites
- Strong strategic, problem-solving, and conflict management skills, with the ability to work effectively with stakeholders from diverse sectors and backgrounds.
- Demonstrated leadership combining patience, diplomacy, and emotional intelligence with the firmness required to achieve objectives and manage complex situations.

How to apply:

Please email your CV and a cover letter outlining how you meet the qualifications as described above to amazon.ia@andesamazonfund.org with the subject line "Amazon.ia Program Manager Application." Finalists will be selected by the Amazon.ia initiative steering committee. Deadline to apply: **July 5, 2026.**

Amazon.ia

Inteligencia Ambiental

Descripción de la Posición: Gerente de Programa

Amazon.ia: Inteligencia Ambiental, el nombre de trabajo para una iniciativa de múltiples socios para producir evidencia oportuna y útil para la gestión de la biodiversidad que impulse la conservación y restauración efectiva en toda la Amazonía, está buscando un(a) **Gerente de Programa**. El(la) Gerente de Programa es un(a) coordinador(a) de la iniciativa Amazon.ia, y reporta al Comité Directivo, y un(a) facilitador(a) de los grupos de trabajo y del Foro de Socios de la iniciativa. El(la) candidato(a) seleccionado(a) deberá tener experiencia comprobada coordinando exitosas coaliciones multinacionales y experiencia en el monitoreo de la biodiversidad, con un sólido conocimiento de tecnologías de conservación y/o técnicas de modelamiento. Buscamos un(a) socio(a) dinámico(a), flexible y capaz de orientar estratégicamente la iniciativa; que construya y fortalezca colaboraciones sólidas, comprenda la importancia de adaptabilidad y alineación, posea una destacada capacidad de organización, y que se enorgullezca de seguir el progreso y el impacto en múltiples actividades, tareas y colaboradores.

El(la) Gerente de Programa contará con apoyo y participación regular de líderes de las organizaciones socias de Amazon.ia, desde estaciones biológicas de campo e institutos nacionales de investigación de la biodiversidad, hasta ONG nacionales e internacionales; de socios de recursos, incluyendo financiadores y empresas de tecnología; y de equipos de investigación en el ámbito académico y en el campo. Alojado(a) en una institución socia de la iniciativa, el(la) Gerente de Programa será parte de la institución y podrá recurrir a su equipo, además de ser una figura central en la iniciativa, y podrá convocar a miembros del Foro de Socios, el Comité Directivo y el Grupo Asesor según sea necesario.

El puesto de Gerente de Programa comienza como un acuerdo de 4 años, donde la posición será revisada y renovada anualmente.

Ubicación:

Los(las) postulantes deben ser elegibles para trabajar y vivir en uno de los siguientes países: Colombia, Brasil, Ecuador, Perú o Bolivia. El(la) postulante será contratado(a) por una institución anfitriona con una misión enfocada en la conservación o ciencia de la biodiversidad en uno de estos países. La institución anfitriona será identificada como parte del proceso de selección de un(a) candidato(a) exitoso(a) por el Comité Directivo de Amazon.ia.

Roles y responsabilidades:

Estrategia, Planificación y Gobernanza

- Basándose en la visión y estrategia de Amazon.ia (ver nota conceptual inicial al final del PDF), co-desarrollar con el Comité Directivo los planes de trabajo anuales, presupuestos y hojas de ruta.
- Informar sobre el progreso y los hitos al Comité Directivo, y servir como su secretario(a); plantear problemas a tiempo y ayudar a solucionar y gestionar de forma adaptativa la hoja de ruta.
- Ayudar a facilitar y contribuir a las reuniones e informes del Grupo Asesor.
- Apoyar el compromiso con agencias gubernamentales nacionales y subnacionales para alinear los resultados de Amazon.ia con las políticas y necesidades institucionales.

Coordinación y Comunicación de la Alianza

- Facilitar reuniones periódicas del Foro de Socios, grupos de trabajo y comités de acción; asegurar la toma de notas, síntesis y seguimiento de alta calidad.
- Agilizar la comunicación entre los grupos de trabajo para asegurar la alineación y la colaboración.
- Coordinar las comunicaciones de la iniciativa entre los socios y apoyar las comunicaciones externas en colaboración con las instituciones asociadas.
- Evaluar proactivamente el panorama de instituciones e iniciativas relevantes, y apoyar el compromiso con posibles socios para expandir y fortalecer Amazon.ia.
- En colaboración con los sitios e instituciones anfitrionas, co-desarrollar talleres en el sitio según sea necesario para los objetivos de la iniciativa.
- Realizar visitas de campo según sea necesario para coordinar y gestionar las actividades de la iniciativa.

Monitoreo, Informes y Gestión del Conocimiento

- Seguir el progreso hacia los hitos y resultados bajo los planes de trabajo y hojas de ruta para la iniciativa general, y en colaboración con los grupos de trabajo de la iniciativa.
- Apoyar la presentación de informes oportunos y efectivos de las instituciones socias de Amazon.ia a Andes Amazon Fund, identificando historias clave y estadísticas.
- Garantizar una gestión efectiva del conocimiento para la iniciativa a través de la documentación y organización de protocolos, estándares y decisiones clave de Amazon.ia.

Representación Externa y Movilización de Recursos

- Apoyar los esfuerzos de recaudación de fondos mediante la preparación de materiales, la coordinación de aportes y la interacción con financiadores según sea necesario.
- Representar la iniciativa en foros públicos y científicos.
- Trabajar de manera transversal con todos los departamentos y equipos dentro de la institución anfitriona para apoyar las comunicaciones, informes, contratos y logística, según sea necesario.

Requisitos:

- Maestría en ciencia de la conservación, ecología cuantitativa, biología o campo relacionado (se prefiere el grado de Doctorado).
- Al menos 5 años de experiencia en gestión de programas; se prefiere experiencia demostrada en la gestión de múltiples proyectos complejos, con meticulosa atención al detalle.
- Experiencia demostrada en la coordinación de coaliciones o alianzas en todos los sectores, incluidas ONG, academia, filantropía y/o el sector privado; fuerte preferencia por la experiencia con esfuerzos multinacionales.
- Familiaridad con el panorama de instituciones que trabajan en conservación en la Amazonía y en América Latina.
- Sólido conocimiento de tecnologías de conservación para el monitoreo de la biodiversidad en el campo, como cámaras trampa, monitoreo acústico pasivo o ADN ambiental (eDNA); se prefiere experiencia de uso directo.
- Fuerte comunicación escrita y verbal en inglés y español o portugués, idealmente los tres.
- Capacidad para establecer relaciones entre sectores, culturas e idiomas.
- Flexibilidad para trabajar de forma independiente y como miembro de un equipo distribuido en un entorno dinámico y en rápida evolución, similar a un start-up.
- Ubicado(a) en un país de la cuenca amazónica.
- Disposición a viajar, particularmente a sitios de campo.
- Fuertes habilidades estratégicas, de resolución de problemas y gestión de conflictos, con la capacidad de trabajar eficazmente con partes interesadas de diversos sectores y antecedentes.
- Capacidad comprobada de liderazgo, equilibrando empatía, diplomacia, e inteligencia emocional con la firmeza necesaria para lograr objetivos y afrontar desafíos complejos.

Cómo postular:

Por favor, envíe su CV y una carta de presentación que describa cómo cumple con los requisitos anteriormente mencionados a amazon.ia@andesamazonfund.org con el asunto “Postulación a Gerente de Programa Amazon.ia”. Los(las) finalistas serán seleccionados(as) por el comité directivo de la iniciativa Amazon.ia. Fecha límite para postular: **5 de julio de 2026.**

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Inteligencia Ambiental

Descrição da Vaga: Gerente de Programa

Amazon.ia: Inteligência Ambiental, o nome provisório de uma iniciativa multi-parceiros para produzir inteligência oportuna e acionável sobre a biodiversidade que impulsiona a conservação e restauração eficazes em toda a Amazônia, está buscando um **Gerente de Programa**. O Gerente de Programa é um coordenador da iniciativa Amazon.ia, respondendo ao Comitê Diretivo, e um facilitador dos grupos de trabalho e do Fórum de Parceria da iniciativa. O candidato selecionado terá experiência comprovável na coordenação de coalizões multinacionais bem-sucedidas e expertise em monitoramento da biodiversidade, com forte conhecimento em tecnologias de conservação e/ou técnicas de modelagem. Buscamos um parceiro dinâmico e flexível para ajudar a orientar a iniciativa; alguém que construa colaborações sólidas, compreendendo a necessidade de flexibilidade e alinhamento; um especialista organizacional que se orgulhe de acompanhar o progresso e o impacto em muitas atividades, tarefas e colaboradores.

O Gerente de Programa terá apoio e engajamento regulares de líderes nas organizações parceiras da Amazon.ia, desde estações de campo biológicas e institutos nacionais de pesquisa em biodiversidade até ONGs nacionais e internacionais; de parceiros de recursos, incluindo financiadores e empresas de tecnologia; e de equipes de pesquisa na academia e em campo. Abrigado em uma instituição parceira da iniciativa, o Gerente de Programa fará parte da instituição e poderá contar com sua equipe, além de ser um jogador central na iniciativa, capaz de convocar membros do Fórum de Parceria, Comitê Diretivo e Grupo Consultivo conforme necessário.

O Gerente de Programa começa como um acordo de 4 anos, onde a posição será revisada e renovada anualmente.

Localização:

Os candidatos devem ser elegíveis para trabalhar e viver em um dos seguintes países: Colômbia, Brasil, Equador, Peru ou Bolívia. O candidato será contratado por uma instituição anfitriã com missão focada em conservação da biodiversidade ou ciência em um desses países. A instituição anfitriã será identificada como parte do processo de seleção de um candidato bem-sucedido pelo Comitê Diretivo da Amazon.ia.

Funções e responsabilidades:

Estratégia, Planejamento e Governança

- Com base na visão e estratégia da Amazon.ia (ver a nota conceptual inicial ao final do PDF), co-desenvolver com o Comitê Diretivo planos de trabalho anuais, orçamentos e roteiros
- Relatar o progresso e os marcos ao Comitê Diretivo e servir como seu secretário; levantar questões precocemente e ajudar a solucionar problemas e gerenciar adaptativamente o roteiro
- Ajudar a facilitar e contribuir para as reuniões e relatórios do Grupo Consultivo
- Apoiar o engajamento com agências governamentais nacionais e subnacionais para alinhar as saídas da Amazon.ia com as necessidades políticas e institucionais

Coordenação de Parcerias e Comunicação

- Facilitar reuniões regulares do Fórum de Parceria, grupos de trabalho e forças-tarefa; garantir anotações, sínteses e acompanhamento de alta qualidade
- Agilizar a comunicação entre grupos de trabalho para garantir alinhamento e colaboração
- Coordenar as comunicações da iniciativa entre parceiros e apoiar comunicações externas em colaboração com instituições parceiras
- Avaliar proativamente o cenário de instituições e iniciativas relevantes e apoiar o engajamento com parceiros em potencial para expandir e fortalecer a Amazon.ia
- Em colaboração com locais e instituições anfitriãs, co-desenvolver workshops presenciais conforme necessário para os objetivos da iniciativa
- Realizar visitas aos locais conforme necessário para coordenar e gerenciar as atividades da iniciativa

Monitoramento, Relatórios e Gestão do Conhecimento

- Acompanhar o progresso em relação aos marcos e resultados nos planos de trabalho e roteiros para a iniciativa geral e em colaboração com os grupos de trabalho da iniciativa
- Apoiar relatórios oportunos e eficazes das instituições parceiras da Amazon.ia para o Andes Amazon Fund, identificando histórias e estatísticas importantes
- Garantir uma gestão eficaz do conhecimento para a iniciativa por meio da documentação e organização dos principais protocolos, padrões e decisões da Amazon.ia

Representação Externa e Mobilização de Recursos

- Apoiar esforços de captação de recursos preparando materiais, coordenando contribuições e engajando-se com financiadores conforme necessário
- Representar a iniciativa em fóruns públicos e científicos
- Trabalhar em departamentos e equipes dentro da instituição anfitriã para apoiar comunicações, relatórios, contratos e logística, conforme necessário

Qualificações:

- Mestrado em ciência da conservação, ecologia quantitativa, biologia ou área relacionada (Doutorado preferencial)
- Pelo menos 5 anos de experiência em gestão de programas; preferência por experiência demonstrada na gestão de múltiplos projetos complexos, com atenção cuidadosa aos detalhes
- Experiência demonstrada na coordenação de coalizões ou parcerias entre setores, incluindo ONGs, academia, filantropia e/ou setor privado; forte preferência por experiência com esforços multinacionais
- Familiaridade com o panorama de instituições que trabalham com conservação na Amazônia e na América Latina
- Forte conhecimento de tecnologias de conservação para monitoramento da biodiversidade em campo, como armadilhas fotográficas, monitoramento acústico passivo ou eDNA; preferência por experiência de uso direto
- Forte comunicação escrita e verbal em inglês e espanhol ou português, idealmente nos três idiomas
- Capacidade de construir relacionamentos entre setores, culturas e idiomas
- Flexibilidade para trabalhar de forma independente e como membro de uma equipe distribuída em um ambiente de startup dinâmico que está em rápida evolução
- Localizado em um país da bacia amazônica
- Disponibilidade para viajar, particularmente para locais de campo
- Fortes habilidades estratégicas, de resolução de problemas e de gestão de conflitos, com capacidade de trabalhar eficazmente com partes interessadas de diversos setores e origens.
- Liderança demonstrada combinando paciência, diplomacia e inteligência emocional com a firmeza necessária para atingir objetivos e gerenciar situações complexas.

Como se candidatar:

Por favor, envie seu currículo e uma carta de apresentação descrevendo como você atende às qualificações conforme descrito acima para amazon.ia@andesamazonfund.org com a linha de assunto "Amazon.ia Program Manager Application". Os finalistas serão selecionados pelo comitê diretivo da iniciativa Amazon.ia. Prazo para inscrição: **5 de julho de 2026.**

Amazon.ia

Inteligencia Ambiental*

Actionable Biodiversity Intelligence for the Amazon

Summary

Amazon.ia is a new multi-partner initiative that will revolutionize biodiversity monitoring to strengthen conservation decision-making in the Amazon. Harnessing recent breakthroughs in AI, we will fuse satellite and ground sensor data to deliver actionable biodiversity intelligence at any scale—from individual conservation sites to the entire biome. Amazonian institutions will own the data infrastructure and analytical capabilities, generating real-time insights that directly support their own decision-making needs. For example: alerts when biodiversity metrics cross critical thresholds, evidence of which protected areas are effective, and proof of ecosystem recovery for restoration finance.

This initiative brings together a growing coalition of Amazonian institutions, including leading research groups, conservation organizations, and national institutions. International science partners are bringing technology, satellite data access, and AI expertise. We have reached a technological inflection point that could make wall-to-wall biodiversity monitoring economically viable at the scale conservation requires. We seek $50 million over five years to build this system and demonstrate its impact by 2030.

The Unsolved Problem

In a remote corner of the Ecuadorian Amazon, scientists at the Yasuní Biosphere Reserve have documented a precipitous decline in insectivorous birds. The forest is protected and appears pristine. Is it climate change? Heavy metal pollution from nearby oil operations? Something else? They don't know.

Ecuador's Ministry of Environment is aware of the findings. They wonder: are birds declining elsewhere in their national parks? They have no way to know. Like every country, they can track deforestation nearly as it happens from satellites. But they can't track what's happening beneath the canopy—whether ecosystems are healthy or degrading, wildlife populations are stable or collapsing, or their conservation policies are working.

This is the paradigm of biodiversity monitoring today. We can see if forests are there, but we cannot see if they are healthy without expensive field work. As a result, decision-makers at every level—from local conservation groups to national environmental agencies—are unable to answer the most basic questions: *How is this ecosystem doing? Are things getting better or worse? Have our policies and interventions had an impact?*

Why Existing Approaches Are Insufficient

Historically, biodiversity monitoring has been hyper-local and research driven. Scientists collect data for specific research projects but are often reluctant to share data or standardize methods for broader interoperability. Most biodiversity data remain fragmented across individual sites and concentrated in places most likely to be studied—typically well-protected areas with high biodiversity.

Global initiatives exist to consolidate these data such as the Global Biodiversity Information Facility and IUCN Red List. But the datasets they produce reflect what goes in: patchy, biased data from different points in time, resulting in static, coarse-resolution global maps and indices with limited utility for decision-making.

**Current working name for the initiative*

Thanks to the remote sensing revolution of the past decade, we can now track forest cover in near real-time, anywhere in the world. But satellites cannot replicate this success for biodiversity. Most biodiversity exists beneath the forest canopy, invisible to satellite sensors.

The result: outside a few intensively studied sites, we have virtually no current, accurate information about ecosystem health or biodiversity status across the Amazon. The Amazon represents 600 million hectares of the world's most biodiverse ecosystems, and the world is trying to protect this critical biome using monitoring approaches that cannot scale beyond well-funded research stations.

Why Now: The Inflection Point

We believe this decade will be remembered as the moment when biodiversity became as trackable as forest cover. For the first time, AI-powered multi-modal data fusion can make wall-to-wall biodiversity monitoring economically viable at the scale conservation requires. Four technology trends have converged to create a generation-defining opportunity:

Earth observation technologies can now deliver the quantity and quality of data needed to detect subtle ecosystem changes over time. Hyperspectral satellites can measure plant functional diversity from space. The cost of DNA barcoding has declined from $30 to less than a cent per specimen, and a portable genetic laboratory now fits in a backpack. Edge computing enables camera traps to perform on-device species identification. Bioacoustics sensors can operate continuously for months on solar power. These technologies are pushing biodiversity data collection beyond traditional research sites into new landscapes.

Remote connectivity and cloud computing can bring real-time ground sensor data from remote areas online for analysis. Satellite networks like Starlink have connected previously isolated locations. Ground sensors can now stream data to cloud servers for immediate processing and analysis, with insights delivered to users in near-real time rather than waiting months for manual data retrieval.

AI foundation models enable multi-modal data fusion at unprecedented scale and complexity. Previous machine learning models for conservation operated on single data streams—satellite imagery or acoustic recordings or camera trap images. New geospatial foundation models can identify patterns across increasingly large and complex datasets, enabling fusion of space-based and ground-based sensor networks to automate identification of biodiversity patterns and anomalies.

Technical capacity in Amazonian institutions has reached critical mass to build, own, and manage next-generation monitoring solutions. Thanks to sustained investment by public and private philanthropies over the past decades, a growing number of local conservation organizations, national research institutions, and Indigenous communities are now equipped with geospatial tools and technical expertise. They are technology innovators, not just data collectors.

Our Vision: Actionable Biodiversity Intelligence at Any Scale

Imagine a world where a park manager protecting critically endangered primates gets an alert: *mammal diversity in Zone 3 has dropped 35% over the past month*. She investigates and discovers an illegal hunting camp. Or where an Indigenous community restoring previously cleared forests can show funders: *here's proof that bird diversity is recovering in our restoration areas compared to degraded control sites nearby*. Or where a national environmental agency doesn't just report "15% of land is protected" to the Global Biodiversity Framework, but reports *"in 80% of our protected areas, key biodiversity indicators are stable or improving over the last three quarters."*

These are the types of insights Amazon.ia will generate at full power:

At the site scale: Tailored near-real time change alerts, driven by biodiversity and ecosystem condition indicators and models. For instance, at Tiputini dashboards will track insectivorous bird presence and distribution. Continuous tracking of species presence, population trends, and key indicators of ecosystem structure and function.

At the jurisdiction scale: Portfolio analytics for protected area networks. Evidence-based prioritization of where to invest in protection or restoration. Comparative analytics showing whether key management interventions are outperforming control sites. Early warning of large-scale changes.

At the biome scale: Consistent, high-resolution metrics of ecosystem condition and biodiversity status across the Amazon. Full-coverage maps showing where ecosystems are healthy, recovering, or degraded, and where biodiversity is improving versus declining. Early warning of large-scale changes.

Our Innovation: What Makes Amazon.ia Different

Amazon.ia is building something fundamentally different from past large-scale biodiversity monitoring initiatives, based on two interlocking innovations:

Technical innovation: Multi-modal AI-powered biodiversity intelligence

We will deploy a spectrum of next-generation monitoring technologies—hyperspectral imaging, camera traps, bioacoustics, and eDNA—and fuse these disparate data streams using advanced machine learning and AI models. This fusion is the breakthrough. A satellite might detect canopy stress, acoustic sensors might reveal insect population collapse, camera traps might show mammal range shifts. Individually, these are data points. Fused, they tell you if the ecosystem is in trouble or recovering and why.

Institutional innovation: Locally-owned infrastructure and analytical capacity

Past large-scale biodiversity monitoring efforts extracted data from sites and did analysis elsewhere. We will build data infrastructure and analytical capabilities that Amazonian institutions own and control. National research institutes and environmental agencies will support on-the-ground groups collecting data, manage interoperable data repositories, develop AI models trained on their own ecosystems, and generate insights that answer *their* priority questions. International partners will provide technology and expertise.

This approach is intended to address the adoption problem and the sustainability problem simultaneously. Decision-makers will use this information because they're generating it themselves, answering their own questions, and integrating it into their own systems and workflows. The system will outlast any single funder by building permanent capacity in long-standing institutions.

Our Plan: What We Are Building

To deliver on our vision, we will build two interconnected systems that work in concert: a distributed observatory generating continuous, standardized biodiversity data across the Amazon, and an AI-powered intelligence system that transforms this raw data into actionable insights for decision-makers at every scale.

A Pan-Amazonian Biodiversity Observatory

We will establish a distributed network of 10-30 "core sites" with always-on, standardized multi-modal monitoring, plus many more "constellation sites" using snapshot approaches (intensive monitoring for defined periods). Core sites are well-established locations with existing infrastructure and long-term data,

where we can build immediately. Initial core sites include the Tiputini Biodiversity Station in Ecuador, the Mamirauá Reserve in Brazil, the Los Amigos Biological Station in Peru, and Madidi National Park in Bolivia. Constellation sites will expand coverage to diverse ecosystem types, conditions, and governance contexts, including Indigenous territories and community-managed areas.

The observatory will function as a production system generating standardized biodiversity data continuously. Ground sensor data from core and constellation sites will stream to cloud-based repositories managed at the site level and by designated "national network hubs"—existing institutions like Instituto Humboldt in Colombia—that will identify and support constellation sites, build data infrastructure, train teams, and ensure data quality. Data repositories will be interoperable, following shared data standards that allow integration across sites and data types. Hyperspectral satellite data covering the entire biome will be processed and made available through partnerships with Planet Labs and others. All data streams will feed into a unified analytical environment where they can be accessed, combined, and analyzed.

A Multi-Scale Biodiversity Intelligence System

Local data science teams at the core sites and in national network hubs, supported by international partners like Google Earth Engine, Microsoft AI for Good Lab, and university laboratories, will develop and train models tailored to their ecosystems and priority questions. This includes species identification models (trained on local camera trap and acoustic data), ecosystem condition models (fusing satellite and ground data), and anomaly detection models (identifying unusual patterns that signal threats or change). Models will be validated using longitudinal data from core sites, then deployed across constellation sites and scaled biome-wide where satellite coverage enables extrapolation.

Insights will be delivered through multiple channels designed for different users. Site-level teams will generate alerts and dashboards integrated into their existing management tools. National and subnational agencies will access analytics through interfaces that plug into their current monitoring and reporting systems (e.g., for land-use planning or Global Biodiversity Framework reporting). Biome-wide analytics will be made freely available through the Global Nature Watch platform and API, which allows users to ask questions like "show me all areas where mammal diversity has declined more than 20% in the past year" and get answers in their own language based on peer-reviewed data. All interfaces will be designed in collaboration with intended users to ensure they answer real questions within existing workflows.

International partners will provide computing infrastructure (cloud resources), specialized AI expertise, and satellite data access, but local teams will control model development priorities, validate outputs, and own the resulting analytical capabilities. This ensures the intelligence system evolves to serve local decision-making needs.

Our Partnership Model

Amazon.ia is being designed for ownership and leadership by Amazonian institutions. Progress toward this goal is already evident. Research groups at core sites—Universidad San Francisco de Quito in Tiputini, Instituto Mamirauá, Conservación Amazónica (ACCA) in Los Amigos, Wildlife Conservation Society-Bolivia, ALFA in the BDFFP—are fully committed partners co-designing the initiative. National research institutes including Instituto Humboldt, Brazil's National Institute for Amazonian Research (INPA), and others are engaging to define the vision for "national network hubs" that will anchor the network.

Conservation technology platforms and networks–such as WildMon's Wildlife Insights, Cornell Lab of Ornithology's Merlin, BOLD Systems of the International Barcode of Life, and Smithsonian's ForestGEO–are supporting the flow, aggregation, and analysis of data. International partners—including

Andes Amazon Fund, Planet Labs, World Resources Institute, Arizona State University, Microsoft AI for Good Lab, Bezos Earth Fund, Massachusetts Institute of Technology, Universitat Politécnica de Catalunya, and George Mason University—have committed to providing technology access and data science expertise.

Our proposed funding model will support this distributed ownership, with resources flowing directly to national hubs and site teams rather than through a single intermediary.

Our Ask

We are seeking investment to establish the foundation for permanent biodiversity monitoring across the Amazon before 2030, when Global Biodiversity Framework targets come due and the window for preventing ecosystem collapse may close. Early seed funding has enabled proof-of-concept work to begin at two core sites (Mamirauá and Los Amigos) to demonstrate feasibility of multi-modal monitoring and data fusion. To realize our full vision by 2030, we seek $50 million over five years:

- 40% for national hubs and site operations: establishing data infrastructure, onboarding core and constellation sites, deploying monitoring technology, building and training local teams.
- 25% for AI development and data science: building AI models for data fusion, developing scale-appropriate analytics, creating decision-support tools.
- 20% for international technical partnerships: hyperspectral satellite data access, cloud computing resources, specialized expertise from university laboratories and technology companies.
- 15% for coordination, documentation, and knowledge transfer: ensuring methods are open and replicable and engaging externally to anchor outputs to key political moments.

Beyond financial support, we seek partners to join as new core or constellation sites, establish or strengthen national network hubs, contribute computing resources or satellite data, innovate with AI models, and connect this infrastructure to decision-making workflows where it can drive conservation impact.

Our Urgency

The Amazon is approaching an ecological tipping point, as its biodiversity faces ever-greater threats from climate change, deforestation, pollution, and species decline. The Kunming-Montreal Global Biodiversity Framework has set ambitious targets to protect 30% of land and water and restore 30% of degraded areas by 2030. Decision-makers need intelligence systems that match the urgency and scale of this challenge. The technology to provide this intelligence has finally arrived at the cost and capability that will enable Amazon-wide scaling. The question is not whether next-generation biodiversity monitoring is possible, but whether we will build it in time to make a difference.