





5.1 Proyecto Vida Silvestre

<p>Name of the project</p>			
<p>Partners</p>			
<p>What is PVS?</p>	<p>The Proyecto Vida Silvestre - PVS is an initiative for the conservation of biodiversity financed by Ecopetrol. Since 2014, in partnership with Wildlife Conservation Society (WCS) and the Santo Domingo Foundation, the Fund for Environmental Action and Children has developed actions in the working landscapes.</p> <p>PVS seeks to address the conservation challenge at Ecopetrol's operation landscapes, with the goal of achieving the long-term conservation of biodiversity, through the implementation of conservation actions focused on meeting the requirements of populations of threatened species.</p>		
<p>Partner organizations</p>	<p style="text-align: center;">PAISAJE LLANOS</p> <div style="display: flex; justify-content: space-around; align-items: center;">     </div> <p style="text-align: center;">PAISAJE MAGDALENA</p> <div style="display: flex; justify-content: space-around; align-items: center;">      </div> <p style="text-align: center;">PAISAJE PUTUMAYO</p> <div style="display: flex; justify-content: space-around; align-items: center;">     </div>		
<p>Intervention landscapes</p>	<p>Llanos orientales (Eastern plains): The work area covers more than 1,320,000,254.93 hectares.</p> <p>This landscape is characterized mainly by extensive savannas, morichales, mountain ranges and gallery forests, and although most of its ecosystems are well preserved, in recent years the intensity of pressures on biodiversity has increased.</p> <p>The PVS project worked on three sub-areas or windows, where different strategies were carried out:</p> <ul style="list-style-type: none"> ✓ Lower and middle basin of the Bita River, where conservation actions focused on the landscape species Danta (<i>T. terrestris</i>), Conger (<i>A. nitens</i>) and Moriche (<i>M. flexuosa</i>). ✓ Tomo River basin, where the reintroduction of the llanero alligator (<i>C. intermedius</i>) was worked. ✓ Arauca, where special attention was given to the Charapa Turtle (<i>P. expansa</i>). 		

Middle Magdalena:

It is located between the departments of Antioquia and Santander in the area of the valley and the alluvial plains, and has an area of 253,612.8 ha, where agricultural territories and natural and artificial bodies of water are located.

The characteristic vegetation is tropical dry forest (Bs-T) in different stages of succession.

The five target species are the Marimonda or Choibo (*Ateles hybridus*), the Blue-billed Paujil (*Crax alberti*), the Red-faced Tree, the Caribbean Manatee (*Trichechus manatus*), and the Striped Catfish (*Pseudoplatystoma magdaleniatum*).

Amazonian Andean Foothills:

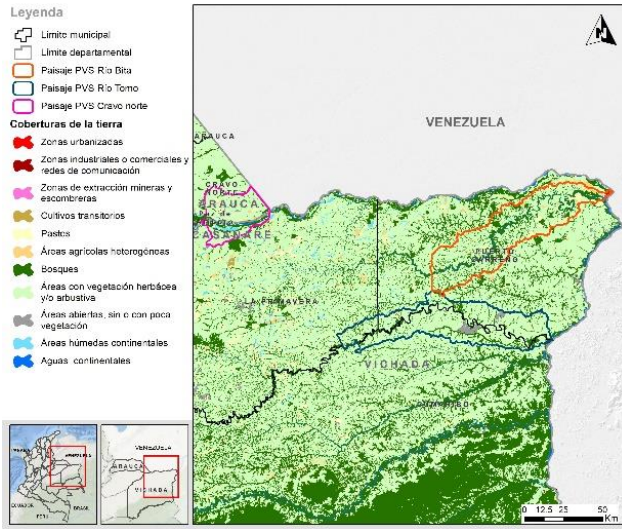
This landscape is located in the department of Putumayo and has an area of 18,886 ha located in the municipality of Orito (villages El Líbano and Lucitania), adjacent to the Sanctuary of Medicinal Plants Orito Ingi Ande.

It has an altitudinal range of 510 to 1669 meters above sea level and mostly preserves forest cover, of humid sub-Andean forests and humid basal forest. Given the history of deforestation, the work area generates a conservation-related scenario since there is no substantial damage to natural cover. Additionally, the effects of current deforestation can be minimized through restoration processes that improve system connectivity.

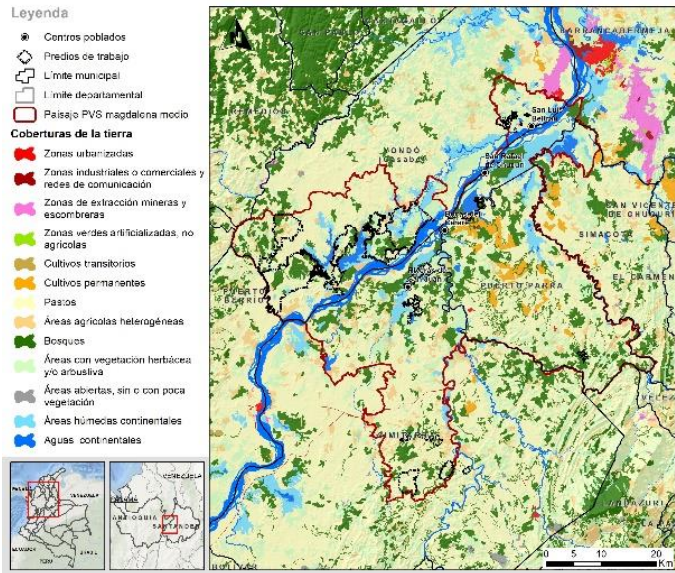


Eastern Plains:

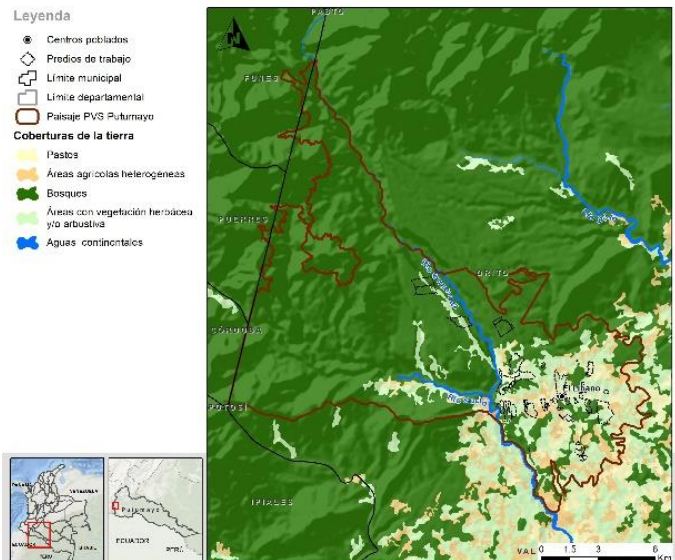
Map



Middle Magdalena:



Amazonian Andean Foothills:



SDGs which contributes to it	
SbN Social Challenge (IUCN)	
Main Results	<p>Fondo Acción conducted a carbon project feasibility assessment (ARR or REDD+) based on forest cover, land tenure, existing and potential conservation agreements for the areas within the PVS working landscape: Bitá River basin, Magdalena Medio Santandereano and Putumayo. At the same time, training sessions were held for landowners and communities that are the focus of actions on the generalities of the carbon service, the carbon market and the steps to follow to have a viable carbon project in the territories.</p> <p>The restoration cores correspond to the three PVS landscapes (Magdalena Medio, Cuenca del Río Bitá, Piedemonte in Putumayo), the RNSC La Carranchina (Córdoba), Veredas Guaraguao and El Cerro (Chimichagua, Cesar), two DRMI in the Colombian Pacific (DRMI Encanto de los Manglares del Bajo Baudó, in Chicó, and DRMI Isla Ají, in Valle del Cauca), Cali River Basin (Felidia River and Aguacatal River, Cali, Valle del Cauca) and the Andean Bear Corridor in La Cruz (La Cruz, Nariño). More than 120,000 seedlings have been planted in 68 farms (La Cruz, Nariño). More than 120,000 seedlings have been planted in 68 properties with agreements for planting and 7 community nurseries have been supported with a propagation capacity of between 5,000 and 20,000 native seedlings.</p> <p>In Magdalena Medio, productive initiatives were carried out in three departments: Antioquia, Cesar and Santander, where work was carried out under conservation agreements on 21 farms. Five (5) types of sustainable productive initiatives were worked on: a) 5,564 m² of productive yard in 18 farms; b) 137m² of species and aromatic herbs in 20 farms; c) 10 hectares of organic agroforestry cocoa in five (5) farms; d) five (5) hectares of fodder bank for animal feed in six (6) farms and e) two (2) hectares of plantain in three (3) farms. Also, from July to October, 12,700 kilograms of organic fertilizer, 570 kilograms of efficient microorganisms and 485 liters of mineral broths have been produced in the 21 farms intervened. In addition, three community initiatives have been supported: a) Production and marketing of fertilizers and organic food - ASOMUCARE and production and marketing of forestry and fruit trees - ASOPESBOCAR. There are 57 people who benefited from all the productive initiatives. A total of 36,185 seedlings of native species have been planted on 10 properties, seeking to recover vegetation associated with water margins, establish living fences, connectivity, and forage corridors, strengthen cocoa agroforestry systems, and enrich existing forest areas with secondary vegetation. A wetland management guidelines document has been prepared and progress is being made on guidelines for the management of the Chucuri marsh (Barrancabermeja). Work is being done on community monitoring of the Caribbean manatee, strengthening community organization and gender collectives in the areas of Campoamalia (Aguachica, Cesar), Sabana de Torres (El Cerrito- Caño Peruétnano), Campo Duro (Ciénaga de Paredes), Barrancabermeja/ Chucuri/ Yondó</p>

(Totumo, Remolinos), and Ciénaga de Chucuri; Carare San Juana swamp complex, where work is being done with fishermen, JACs, and women's collectives. Among the work groups are Asoperbocar (Bocas de Carare, Puerto Parra), Guardianes del manatí (Riberas de San Juan, Cimitarra), Asopromanadí and Proecommanadí (Caño Peruetano and Ciénaga Paredes), Asomanadí and JACs of El Descanso (Caño Negro and Caño Trinidad, Cimitarra). Fondo Acción, with the community of Bocas de Carare, Puerto Parra, developed the Casa Taller education strategy with the participation of educational institutions and adult, youth and children's members of the community.

In the Eastern Plains, sustainable productive initiatives were worked on in two nuclei, for La Virgen (Arauca) five (5) productive patios were implemented with the planning of irrigation solutions for each one of them, and technical assistance was provided to five (5) more patios that were implemented in the previous PVS. For the Bitá basin, the commercial harvesting of moriche continued to be strengthened, with a harvest of more than 2,100 kilograms of fruit that produced 400 kilograms of pulp, all of this with three owners of properties in the tapir corridor. The Nakua working group (landowners) has been created and strengthened to take advantage of NTFPs in the watershed. In this exercise, the group has participated in two (2) regional events where it has exhibited six (6) types of products derived from moriche (ice cream, cake, cookies, yogurt, dessert, and jam), in addition, between July and October, six production and sales days of these products have been held, with revenues of over \$3,500,000. Regarding the charapa strategy, 12 people from 10 family nuclei carried out monitoring and surveillance activities on the beaches where charapa turtles lay their eggs during the reproductive season of the species in 2022, covering 40 km of beaches in the area prioritized by the project with surveillance and community monitoring actions; 548 charapa nests were monitored by the foster parents of Vereda la Virgen; the 5th charapa turtle festival was held, organized and developed by the community of la Virgen with 116 people in attendance. As part of the strategy for the caiman llanero, a plan of action for the conservation of the species was published, a survey was prepared for the collection of primary information on the negative interaction (conflict) between caimans and humans implemented in the Tomo river basin (PNN El Tuparro), the release of caimans is planned with PNN El Tuparro, Roberto Franco Biological Station of the National University and WCS, within the framework of the national strategy for the conservation of caimans. A total of 24,312 plants have been planted on 15 properties to expand the forest edge, generate connectivity corridors, strengthen silvopastoral systems and firebreak barriers.

In Putumayo, technical assistance was provided to 13.2 hectares of agroforestry coffee in 12 farms and 11 hectares of cocoa in 14 farms. The process of converting these two crops to organic systems began with the implementation of: a) six (6) coffee fermentation pits; b) eight (8) solar dryers for coffee (2) and cocoa (6); and c) 11 pits for the installation of biofactories for organic manure and fertilizers. A total of 21 farms are participating, benefiting an equal number of families. A total of 12,904 trees have been planted on 8 farms to enrich stubble and restore forests in areas degraded by grazing. Two nurseries are in operation, each producing 10,000 native seedlings, managed by the Women's Collective for the Conservation of the Chorongó Monkey and the Cock of the Rock Collective.

Some of the publications directly or indirectly derived and supported by the PVS are:

	<p>1. Corridors in heavily fragmented landscapes: Reconnecting populations of Critically Endangered brown spider monkeys (<i>Ateles hybridus</i>) and sympatric terrestrial vertebrates in the lowland rainforests of Central Colombia. https://onlinelibrary.wiley.com/doi/10.1111/rec.13556</p> <p><i>A publication showing the success of the corridors implemented in the PVS landscape.</i></p> <p>Landscape species as a biodiversity conservation strategy: quantitative evaluation of their effectiveness. https://raccefyn.co/index.php/raccefyn/article/view/las-especies-paisaje-como-estrategia-de-conservacion-de-la-biodi/3051</p> <p><i>A publication that shows the working model of landscape species and tests the assumptions.</i></p> <p>Mitochondrial Genetic Diversity, Population Structure and Detection of Antillean and Amazonian Manatees in Colombia: New Areas and New Techniques. https://www.frontiersin.org/articles/10.3389/fgene.2021.726916/full</p> <p><i>A publication that uses data collected in the PVS and several other projects to analyze the genetic structure of the Caribbean manatee.</i></p> <p>4. Effects of selective fishing on a small-scale multi-species and multi-gear freshwater fishery in the Magdalena River Basin (Colombia) https://cdnsiencepub.com/doi/10.1139/cjfas-2020-0216</p> <p><i>An analysis of catfish stocks in the Magdalena using information (partially) collected during the PVS, but also much other information collected by the researchers.</i></p> <p>5. Strengthening fisheries governance and its contribution to the conservation of the striped catfish <i>Pseudoplatystoma magdaleniatum</i> in a sector of the Middle Magdalena River (Colombia).</p> <p>Chapter of the book "Communities with a voice: the future of artisanal fisheries in Latin America and the Caribbean", in which fishermen from the Middle Magdalena and PVS researchers describe the process of strengthening governance for the conservation of striped catfish in the Middle Magdalena and communities.</p>
Opinions	<p>"The community has opened its doors to the protection of the turtle, which is not easy because its use and consumption has been a historical cultural tradition; somehow the families who decided to bet on conservation through the agreements are sowing a seed for their future" – Ernesto Ome, sustainable livelihoods specialist, WCS.</p>

Links of interest

<https://colombia.wcs.org/es-es/WCS-Colombia/Noticias/articleType/ArticleView/articleId/17123/LA-RESTAURACION-MUCHO-MAS-QUE-SEMBRAR-ARBOLES.aspx>

<https://colombia.wcs.org/es-es/WCS-Colombia/Noticias/articleType/ArticleView/articleId/17121/LA-CONSERVACION-TAMBIEN-DA-ESPACIO-AL-IMPULSO-DE-LA-PRODUCTIVIDAD.aspx>

<https://colombia.wcs.org/es-es/WCS-Colombia/Noticias/articleType/ArticleView/articleId/16990/RED-DE-ATENCION-DE-VARAMIENTOS-AUXILIARA-A-MANATIES-EN-EMERGENCIA.aspx>

<https://colombia.wcs.org/es-es/WCS-Colombia/Noticias/articleType/ArticleView/articleId/16993/YELSIN-SALGADO-UNO-DE-LOS-NUEVOS-GUARDIANES-DE-BOCAS-DEL-CARARE.aspx>

<https://colombia.wcs.org/es-es/WCS-Colombia/Noticias/articleType/ArticleView/articleId/16889/ACUERDOS-EN-YONDO-PARA-LA-CONSERVACION-DE-LA-TORTUGA-DE-RIO.aspx>

<https://colombia.wcs.org/es-es/WCS-Colombia/Noticias/articleType/ArticleView/articleId/16888/EN-EL-LIBANO-SE-GRADUARON-EN-AVITURISMO-CRIANZA-DE-ABEJAS-Y-BUENAS-PRACTICAS-EN-TURISMO.aspx>

<https://colombia.wcs.org/es-es/WCS-Colombia/Noticias/articleType/ArticleView/articleId/16753/HISTORIAS-Y-RELATOS-DE-LA-CONSERVACION-Y-LA-RURALIDAD--OCTUBRE-2021.aspx>

<https://colombia.wcs.org/es-es/WCS-Colombia/Noticias/articleType/ArticleView/articleId/16799/SALE-A-FLOTE-PLAN-PARA-SALVAR-AL-MANATI.aspx>

<https://colombia.wcs.org/es-es/WCS-Colombia/Noticias/articleType/ArticleView/articleId/16800/CAMARAS-A-LA-CAZA-DEL-CHURUCO.aspx>