



Independent Forest Monitoring Pilot Project in Nicaragua

Monitoring Mission Report No. 010

Mission of the Independent Monitor

Cordillera de Dipilto y Jalapa Nature Reserve Infested Timber Removal Permit for Private Conifer Forest

Location:	El Perote	
Infested Timber Removal Permit:	Authorisation no. 1302PS0107	
Owner:	Félix Pedro Montenegro Ardon	
Drafted by:	Elmer Marín Izaguirre	
Municipality:	Dipilto, Nueva Segovia.	

Mission date: 17 February 2007

Report date: 22 February 2007

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1. Executive summary

On 17 February 2007 the independent monitor carried out a monitoring mission on the "El Perote" Infested Timber Removal Permit (ITRP) in the community of Dipilto Nuevo, Dipilto Municipality, Nueva Segovia. The mission was accompanied by the INAFOR¹ Municipal Delegate, the Forest Regent responsible for the ITRP and the owner of the plan area.

This forest monitoring mission was conducted within the framework of the Cooperation Agreement signed by INAFOR and Global Witness in August 2006. The assistance offered to the mission by the District Delegate Harold Rodríguez and the Municipal Delegate Norman Ibarra was crucial to its success.

The mission focused on the pine forest ITRP area, authorisation no. 1302PS0107, located at "El Perote" in the Cordillera Dipilto y Jalapa Nature Reserve. The ITRP was based on a southern pine beetle infestation in an area of 3.80 hectares. The recommended treatment was 100% cleanup logging, with the harvesting of a total of 208.80 m³ of timber by the owner.

The participants in the mission were the forest monitoring team (known as the independent monitor), the Municipal Delegate for Dipilto, the Forest Regent responsible for the plan and the owner of the area subject to the ITRP.

The independent monitor offers the following conclusions:

- 1. The outbreak of bark beetle infestation was not addressed with appropriate diligence and effective action by the authorities or the owner at the time of the first symptoms and reports.
- 2. Harvesting activities (felling and extraction) were not conducted taking into account the technical recommendations issued by INAFOR and DGAP² nor the recommendations of the ITRP.
- 3. Those responsible for the plan (the regent and owner) have not respected the legitimate process in that they have carried out logging outside the authorised areas without informing the competent authorities.

In view of these conclusions, the monitor presents the following recommendations:

- 1. INAFOR, DGAP and MAGFOR³ should visit the affected site and make an assessment of the recommendations made prior to their authorisations, in this way reducing the risk to which the forest resources and soil are being exposed.
- 2. The corresponding authorities should require the owner and manager of the plan to monitor the bark beetle attack as it is clear that there are other outbreaks of infestation which have not been taken into account in the ITRP.
- 3. INAFOR should take action as quickly as possible against the logging conducted outside the authorised limits by those responsible for the ITRP.

¹ Instituto Nacional Forestal – Nicaraguan Forest Authority

² Department for Protected Areas of the Ministry for the Environment and Natural Resources

³ Ministry of Farming and Forests

2. Composition of the monitoring team

Elmer Marín Izaguirre, Forest Regent and ITRP Manager.

Félix Pedro Montenegro Ardon, owner of the area subject to the ITRP.

Norman Ibarra Almendárez, INAFOR Municipal Delegate, Dipilto.

César Zelaya Blandón, Independent Forest Monitoring Technical Staff, Global Witness.

Arturo Avila Osejo, Independent Forest Monitoring Technical Staff, Global Witness.

3. Assistance provided to the mission

The Municipal Delegate was readily available during the monitoring mission and collaborated in providing relevant information on the managed area. This was of great assistance in carrying out the mission.

4. Constraints

No restrictions were encountered in carrying out this monitoring mission.

5. Description of the fieldwork

The work carried out in the area visited consisted of travelling around the perimeter of the area, corroborating the coordinates and marking out the corners. Subsequently an inventory of the stumps⁴ located outside the area perimeter was conducted. Finally, a general observation of recently conducted logging activities was made.

5.1 Background to the ITRP

The ITRP is located in the Cordillera de Dipilto y Jalapa Nature Reserve and corresponds to a specific area within the Forest Management General Plan (FMGP) that was issued before the Logging Ban entered into effect (Law 585). The Ban suspended the approvals made under the FMGP.

On 7 July 2006, a first inspection of the site was conducted by officials from MARENA⁵, MAGFOR and INAFOR, as well as the Forest Regent and owner of the plan area, in response to an alert by the owner of the forest to an attack by bark beetles. This inspection discovered that an area of 0.75 hectares was affected involving seven outbreaks distributed around 300 young trees. The presence of Ips spp, Dendroctonus frontalis and Dendroctonus valens was noted and blamed for the damage. An appropriate cleanup was recommended and, if the owner proposed to sell on the felled timber, he was instructed to carry out appropriate procedures with the DGAP department of MARENA.

Subsequently, on 21 November 2006, INAFOR conducted an official inspection on the basis of the proposed ITRP presented by the Forest Regent on 17 November 2006. The results of the inspection coincided with the substance of the proposal (inventory information, area affected, forest treatment, etc.). Consequently there was no objection to approving the said plan.

Finally, on 6 December 2006, an inter-institutional municipal committee formed on the basis of the Economic Emergency Decree and including representatives from INAFOR, the Army, the State Attorney for the Environment and the Forest Regent inspected the site in order to corroborate and respond to the proposal previously presented by the owner of the land. This proposal described the presence of the bark beetle, mainly affecting young trees and natural regeneration as well as adult trees to a lesser extent.

⁴ This consisted of counting the stumps, measuring their diameters and georeferencing locations.

⁵ Ministry for the Environment and Natural Resources

5.2 Main elements of the ITRP

The plan area corresponds to 3.80 hectares divided into two affected zones. The first zone of 1.60 hectares would see 94.40 cubic metres of timber extracted; in the second zone, of 2.20 hectares, a total of 114.40 cubic metres of timber would be logged. In both areas the planned cleanup treatment consisted of 100% logging.

This plan was presented to INAFOR on 17 November 2006 and was authorised on 10 January 2007. The DGAP department of MARENA issued its authorisation on 8 January 2007. In addition to these authorisations, technical recommendations were issued to be observed during the execution of the ITRP. (See Annexes 1 and 2)

5.2 Main findings

5.2.1 Monitoring and appropriate response to reported outbreaks.

According to the documentation presented, the first inspection of the site was conducted on 7 July 2006. This determined methods to avoid the outbreak spreading. However, it was not until February 2007 and the approval of the ITRP that cleanup activities were initiated; these involved logging and harvesting timber.

Between the time of the first inspection of the site and commencement of cleanup activities, the owner of the land did not carry out any checks and neither did the authorities offer to monitor the affected area, even though the area was subject to protection and such activities could have avoided the spread of the outbreak.

These circumstances cast doubt on the owner's desire to address the damage appropriately. Indeed it could be in the owner's interest for the damage to spread, as this would involve cleanup logging and result in economic benefits from harvesting the infested timber.

There are currently other areas neighbouring those where there has been intervention which are also affected by the outbreak. However, no measures have been taken to avoid the outbreak spreading in these areas. It has been shown that these outbreaks are in forest consisting of young trees or natural regeneration. Consequently there may not be a significant incentive for the owner to implement cleanup measures as the cost-benefit relationship is not attractive.



Foto 1. Área de bosque joven afectada por gorgojo descortezador del pino. Sin manejo.

5.2.2 Logging intensity compared with damage caused

At the start of February, cleanup logging was conducted in area no. 1. The objective was to eliminate the damage caused by bark beetles. However the activity has jeopardised the soil and surrounding forest because the technical recommendations issued by institutions authorising the ITRP have not been observed. These recommendations include:

- Removing the bark from felled trees before transit to avoid propagation.
- Conducting soil conservation activities, such as constructing containment dikes, in order to avoid erosion.
- The controlled burning of waste.

 Constructing fire breaks around the perimeter of the managed area in order to avoid forest fires.

The photographs below show recent logging activities and the current situation of the area.





Foto 2. Corte de saneamiento en pendiente de 60% y recolección de residuos.

Foto 3. Corte de saneamiento en pendiente de 60% y recolección de residuos.

Although clearly the harvesting activities have not been completed, some measures, such as gathering and piling up waste material to reduce the possibility of fire have been conducted. It is essential that all measures should be effected or otherwise the impact and risk for the soil and the forest would be worsened.

5.3.3 Logging outside the authorised limits

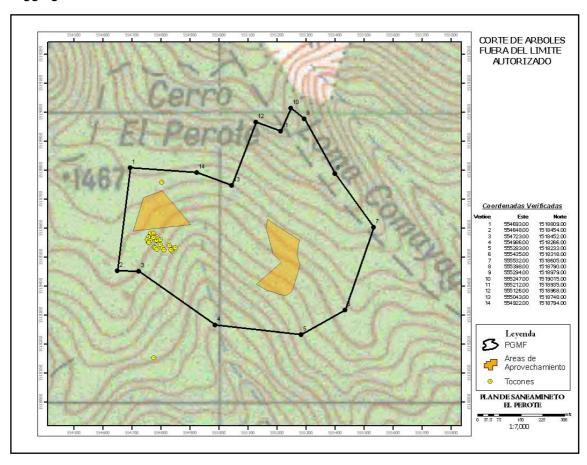
During its inspection of the harvested area, the independent monitor noted the logging of some trees outside the limits proposed in the ITRP authorised by the corresponding institutions. Those responsible for the harvesting did not inform or request authorisation from the authorities for this logging. A total of 32 trees with an approximate volume of 41 cubic metres of timber were felled outside the authorised area. This volume represents a 19.6% increase on the authorised logging volume (208.8 cubic metres).

Table no. 1. Trees felled outside the authorised perimeter

Stump No.	Diameter	Coordinates			Coordinates	
Stump No.	Diameter	Longitude	Latitude			
1	72	554775	15181539			
2	66	554780	1518534			
3	46	554785	1518528			
4	37	554809	1518526			
5	27	554829	1518542			
6	40	554839	1518532			
7	26	554837	1518523			
8	28	554835	1518529			
9	55	554848	1518533			
10	56	554833	1518527			
11	77	554803	1518759			
12	30	554796	1518545			
13	50	554783	1518557			
14	45	554783	1518560			
15	28	554777	1518573			
16	30	554786	1518571			

17	50	554779	1518568	
18	38	554773	1518569	
19	9 28 554758		1518572	
20	33	554755	1518568	
21	50	554755	1518570	
22	65	554753	1518561	
23	24	554755	1518553	
24	50	554763	1518557	
25	65	554757	1518553	
26	45	554777	1518536	
27	53	554804	1518534	
28	53	554796	1518544	
29	45	554787	1518559	
30	40	554797	1518568	
31	30	554805	1518562	
32	42	554763	1518580	

The map below shows the area defined and approved by the authorities and the logging of trees outside this area.



6. Conclusions and recommendations

The independent monitor offers the following conclusions:

- 1. The outbreak of bark beetle infestation was not addressed with appropriate diligence and effective action by the authorities or the owner at the time of the first symptoms and reports.
- 2. Harvesting activities (felling and extraction) were not conducted taking into account the technical recommendations issued by INAFOR and DGAP nor the recommendations of the ITRP document.
- 3. Those responsible for the plan (the regent and owner) have not respected the legitimate process in that there has been logging outside the authorised areas and a failure to inform the competent authorities of this.

In view of these conclusions, the monitor presents the following recommendations:

- 1. INAFOR, DGAP and MAGFOR should visit the affected site and make an assessment of the recommendations made prior to their authorisations, in this way reducing the risk to which the forest resources and soil are being exposed.
- 2. The corresponding authorities should require the owner and the plan manager to monitor the bark beetle infestation as it is clear that there are other outbreaks which have not been considered in the ITRP.
- 3. INAFOR should take action as soon as possible on the logging outside the authorised limits by those responsible for the ITRP.

7. Annexes

Annex 1. DGAP authorisation

Ø 001 Areas Protegidas MARENA. 01/12/2007 11:16 FAX 505 2632618 Gobierno de Nicaragua MARENA No. 001-01007/ DGAP Dirección General de Áreas Protegidas **AUTORIZACIÓN** PARA REALIZAR LAS ACTIVIDADES CONTENIDAS EN EL PLAN DE SANEAMIENTO EL PEROTE, EN BOSQUE DE PINARES AFECTADO POR EL GORGOJO DESCORTEZADOR (Ips ssp.) UBICADO EN LA FINCA EL PEROTE, EN EL MUNICIPIO DIPILTO, EN LA RESERVA NATURAL CORDILLERA DE DIPILTO - JALAPA. Considerando La urgente necesidad de controlar y en lo posible erradicar la plaga de Gorgojo descortezador (Ips. ssp.), que ha sometido a los bosques de pinares a un fuerte deterioro. Que la Comisión Ad-Hoc para el seguimiento a la implementación de la Ley No. 585, Ley de veda para el corte, aprovechamiento y comercialización del recursos forestal, acordó en seción del día siete de septiembre del año 2006, permitir la práctica de actividades de saneamiento en bosques de pinares dentro de áreas protegidas. La inspección de campo realizada por la Comisión Interinstitucional de Nueva Segovia, conformada por INAFOR, Procuraduría Ambiental, Policía Nacional, Ejército Nacional, Alcaldía Municipal y MARENA; y el respectivo informe de inspección técnica que corrobora la afectación de árboles de Pino por brotes de Gorgojo descortezador (Ips ssp.) en la Finca El Perote, ubicada en el área protegida Reserva Natural Cordillera Dipilto – Jalapa. La Dirección General de Áreas Protegidas del Ministerio del Ambiente y los Recursos Naturales, Resuelve Autorizar al Señor Félix Pedro Montenegro, Propietano, para realizar las actividades silviculturales contenidas en el Plan de Saneamiento El Perote, en bosque de pinares afectado por el Gorgojo descortezador (Ips ssp.) ubicado en la finca El Perote, en el municipio Dipilto, en la reserva natural Cordillera de Dipilto - Jalapa, durante el período comprendido entre el 08 de Enero de 2007 al 08 de Diciembre de 2007. Esta autorización está sujeta al cumplimiento de las siguientes condiciones: 1. Se cortarán únicamente los árboles de pino que se encuentran afectados por el Gorgojo descortezador (Ips ssp.) y que presenten focos de afectación en primera, segunda y tercera fase. 2. Descortezar los tocones de los árboles afectados tumbados y quen 1 de 3



Gobierno de Nicaragua

Ministerio del Ambiente y los Recursos Naturales MARENA

Dirección General de Áreas Protegidas

No. 001-01007/ DGAP

- Para el tratamiento de los residuos del descortezado de los troncos, desechos y desrame; se deberá picar, apilar y quemar controladamente.
- De ser necesario cortar una franja de contención al frente del avance del brote, con un ancho no mayor de cinco (05) metros, para evitar que se traslade a los árboles no afectados.
- Realizar actividades de conservación de suelo (diques de protección) a fin de evitar la erosión.
- Antes, durante y después de efectuar las actividades de saneamiento se deberá realizar monitoreo sobre la afectación del Gorgojo en los pinares de la Finca El Perote.
- 7. El regente forestal Cod. 130204001 y el propietarlo responsables del Plan de Saneamiento El Perote deberá elaborar y remitir a la Delegación Territorial del MARENA en Nueva Segovia, con copia a la Comisión Interinstitucional de Nueva Segovia que evaluó la afectación de Gorgojo descortezador en Pinares de la finca el Perote, Informes técnicos sobre cada una de las labores silviculturales realizadas, concluyendo con la entrega de un informe final sobre estas actividades.
- 8. La Comisión Interinstitucional de Nueva Segovia, conformada por INAFOR, Procuraduría Ambiental, Policía Nacional, Ejército Nacional, Alcaldía Municipal y MARENA, supervisará y verificará la aplicación de las labores silviculturales planificadas en el Plan de Saneamiento El Perote, así mismo, remitirá a la DGAP informes trimestrales y final debidamente firmado y sellado por los integrantes de la Comisión Interinstitucional, sobre cada una de las actividades desarrolladas en el marco del Plan de Saneamiento El Perote.
- Este autorización no exime de la obligatoriedad de gestionar permisos de otra indole que establezcan las leyes vigentes del país en relación a la actividad forestal a ser deserrollada en el marco del Plan de Saneamiento El Perote.
- 10. La Delegación Territorial de MARENA en Nueva Segovia; deberá solicitar a la Dirección de Sanidad Vegetal y Semillas del Ministerio Agropecuario Forestal (MAGFOR) en plazo máximo de 30 días hábiles después de la emisión de la presente autorización, la actualización de la hoja de Monitoreo del Gorgojo descortezador del Pino, la cual deberá ser remitida una copia a la Dirección General de Areas Protegidas del MARENA.
- Esta autorización es válida hasta los 08 días del mes de Diciembre de 2007.
- 12. La Delegación Territorial de MARENA en Nueva Segovia; dará seguimiento al cumplimiento de las condiciones establecidas en la presente autorización.

Km. 12 % Carreters Horte Managua, Hicaragua, C.A. Apartado Pastal Na. 5123 (101) 2632617/2331276 Telefax: (505) 2632618

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Areas Protegidas MARENA.

Ø 003



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Ministerio del Ambienta y los Recursos Naturales MARENA

Dirección General de Áreas Protegidas

No. 001-01007/ DGAP

El incumplimiento o infracción a una de estas condiciones anulará la presente autorización y se sancionará de conformidad con las disposiciones consignadas en la Ley No. 217, Ley General del Medio Ambiente y los Recursos Naturales, Reglamento de Áreas Protegidas de Nicaragua, Decreto 14-99 y las Leyes y Reglamentos especiales aplicables.

Dado en la ciudad de Managua a los 08 días del mes de Enero del año dos mil siete.

Iván Ortega Gasteazoto MA Director General de Áreas Protegidas

ORECCION GENER

CC: Sr. Cristóbal (Tito) Sequeira Sr. Milton G. Camacho Bonilla Sre. Martha Virginia Rubio Comisión Interinstitucional Comisión Interinstitucional Archivo. Ministro
Director de Manejo Integral del SINAP
Delegada MARENA – Nueva Segovia
Nueva Segovia
Nacional



GOBIERNO DE NICARAGUA INSTITUTO NACIONAL FORESTAL DELEGACION MUNICIPAL DE DIPILTO



INSPECCION DE PLAN DE SANEAMIENTO

FINCA

: El Perote

DUEÑO

: Félix Pedro Montenegro Ardón

COMARCA

: Dipilto Nuevo

MUNICIPIO : Dipilto

: 21/11/06

OBJETIVO

1. Inspeccionar el Plan de Saneamiento de la plaga del gorgojo descortezador del pino en la finca El Perote a Nombre del Señor Félix Pedro Montenegro Ardón, para valorar en el área, la necesidad de Saneamiento que se proponen en el Plan de Saneamiento.

Según el Plan de Saneamiento se está proponiendo manejar dos brotes de afectación de la plaga del gorgojo descortezador del pino en donde se aplicara el tratamiento Silvicultural de Corta de saneamiento con el método de cortar y aprovechar, en donde se intervendrá la cantidad de 3.80 hectáreas, y de esta manera controlar la afectación de la plaga del gorgojo descortezador del pino.

En base a la inspección que se hizo en el campo, se verifico la afectación del gorgojo descortezador del pino, se tomaron los datos de los dos rodales afectados propuestos, para realizar muestras de inventario y posteriormente compararlos con los datos que se presentan en el Plan de saneamiento, obteniéndose los siguientes datos.

Numero de Brote	Area en ha.	AB m ²	Dap en em.	Alt. en Mts.	Vol./ha. en m ³	Vol./Comp.
1	1.60	6	16	16	42.00	67.20
	1.60	2	40	20	17.00	27.20
2	2.20	5	45	25	52.00	114.40

Al momento de realizar las comparaciones con los datos propuestos en el Plan de saneamiento y los recopilados en el campo se encontró que existe similitud, por consiguiente no se orienta ningún tipo de cambio en el presente Plan.

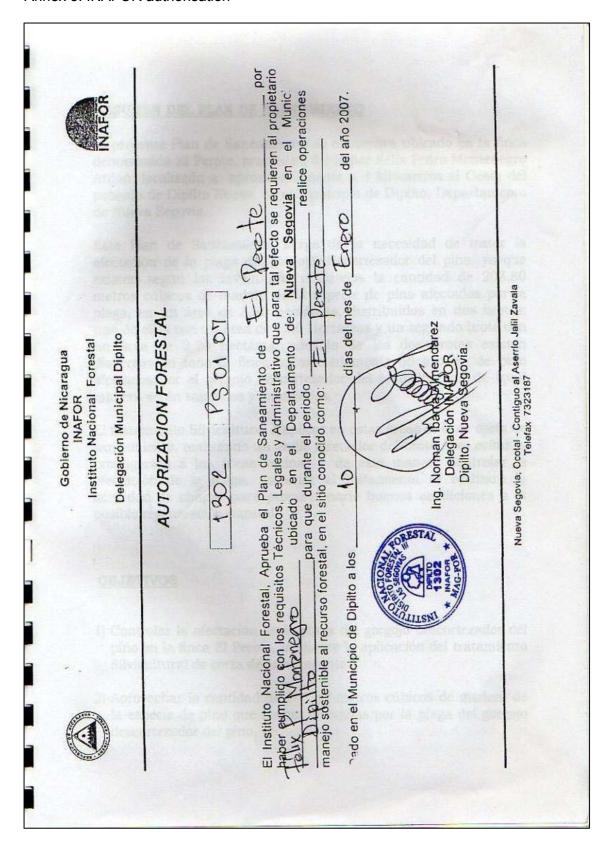
RECOMENDACIONES

- Aplicar el tratamiento Silvicultural de Corta de saneamiento a la mayor brevedad posible y de esta manera controlar la afectación de la plaga del gorgojo descortezador del pino.
- La madera a extraer previo al transporte se debe de sanear descortezado, todos los residuos del aprovechamiento se deben de recoger y quemar.
- Debido a que se aproxima la época seca o verano es necesario que ya estén realizadas las rondas en la finca El Perote y se mantenga vigilancia de manera permanente.
- Que las actividades de aprovechamiento se ejecuten de acuerdo al cronograma de actividades que especifica el Plan de saneamiento.
- 5. Posterior al saneamiento se debe de monitorear el comportamiento de la plaga del gorgojo descortezador del pino y de presentarse una nueva afectación en el área de manejo o área vecina se debe de informar de inmediato a esta delegación para atender el caso como amerita.

Ing. Norman Ibarra A. Delegado Municipal INAFOR, Dipilto

C/c Archivo

Annex 3. INAFOR authorisation



Annex 4. Map of the area and logging conducted outside boundaries.

