



RSPO REQUIREMENTS



Criterion 5.2 The status of rare, threatened or endangered species and high conservation value habitats, if any, that exist in the plantation or that could be affected by plantation or mill management, shall be identified and their conservation taken into account in management plans and operations.

If rare, threatened or endangered species, or high conservation value habitats, are present, appropriate measures for management planning and operations will include:

- Ensuring that any legal requirements relating to the protection of the species or habitat are met.
- Avoiding damage to and deterioration of applicable habitats.
- Controlling any illegal or inappropriate hunting, fishing or collecting activities; and developing responsible measures to resolve human-wildlife conflicts (e.g., incursions by elephants).

Box 1. The Revised High Conservation Values for Indonesia

HCV 1 Areas with Important Levels of Biodiversity *

HCV 1.1 Areas that Contain or Provide Biodiversity Support Function to Protection or Conservation Areas
HCV 1.2 Critically Endangered Species
HCV 1.3 Areas that Contain Habitat for Viable Populations of Endangered, Restricted Range or Protected Species
HCV 1.4 Areas that Contain Habitat of Temporary Use by Species or Congregations of Species

HCV 2 Natural Landscapes & Dynamics *

HCV 2.1 Large Natural Landscapes with Capacity to Maintain Natural Ecological Processes and Dynamics
HCV 2.2 Areas that Contain Two or More Contiguous Ecosystems
HCV 2.3 Areas that Contain Representative Populations of Most Naturally Occurring Species

HCV 3 Rare or Endangered Ecosystems *

HCV 4 Environmental Services

HCV 4.1 Areas or Ecosystems Important for the Provision of Water and Prevention of Floods for Downstream communities
HCV 4.2 Areas Important for the Prevention of Erosion and Sedimentation
HCV 4.3 Areas that Function as Natural Barriers to the Spread of Forest or Ground Fire

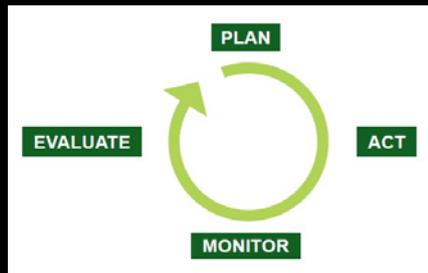
HCV 5 Natural Areas Critical for Meeting the Basic Needs of Local People

HCV 6 Areas Critical for Maintaining the Cultural Identity of Local Communities

IDENTIFYING THE NEED



- Monitoring a uniting focus as an integral part of management
- Helps us to better understand effects of management on HCVs
- Feedback to adaptive management



CURRENT SITUATION



- Scope of existing guidance is limited:
 - Only a specific attribute monitored
 - Potential lack of transferability
 - Focus on complex statistical analyses
 - Use of 'indicator' species
- Best practice guidelines (e.g. Lindenmayer, Gardner, ProForest)
- "Guidelines on management and monitoring of High Conservation Value for sustainable palm oil production in Indonesia" (HCV RSPO Indonesian Working Group, 2009)
- Acknowledged need for monitoring within RSPO P&C



MONITORING



Monitoring protocol should focus on:

- Operational (implementation) monitoring
- Strategic monitoring
- Reporting

Regular patrol monitoring provides managers with an understanding of:

- the threats present and intensity
- identifies 'hotspots' of illegal activities
- demonstrates changes in illegal activity over time
- prioritises areas for management activities
- provides a tool for evaluating the impact of management activities.



2012-2013 PROJECT



- 2012 grant co-funded by BACP, Wilmar International, Yayasan SIPEF Foundation, RSPO, and SAFE Project
- Development of HCV monitoring protocol
- Review of protocol by key stakeholders
- Field trials
- Development of monitoring software programme
- Development of user manuals and training programmes
- Training



PROTOCOL AND SOFTWARE DESIGN



- Structure
 - Logical
 - Adaptable to local situations
- Methods
 - Scientifically robust
 - Consistent
 - Replicable
- Process
 - Required information clearly specified
 - Monitoring frequencies detailed
 - Responsibilities set out
 - Reporting



ZSL MONITORING PROTOCOLS



- A series of five protocols focusing on three broad categories:
 - Threat monitoring (regular patrols including basic water and biodiversity data collection)
 - Habitat monitoring (habitat structure and freshwater)
 - Biodiversity monitoring (camera traps and periodic surveys)
- Each protocol will have accompanying software module.



THREAT MONITORING

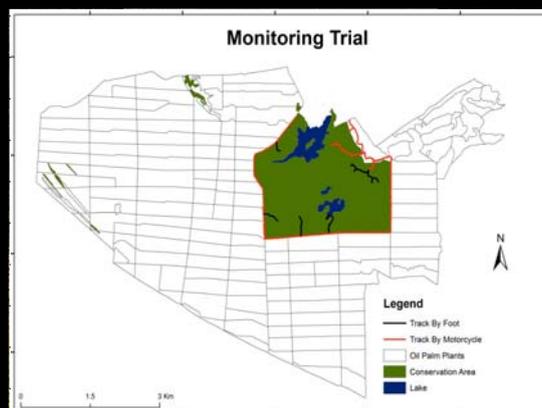


The ZSL Protocol provides:

- Step by step guidance
- Adaptation to local situations
- Guidance for managers on patrol design
- Full training of field staff and support during implementation
- Cohesion with current company structures and reporting standards
- Software training and analysis support



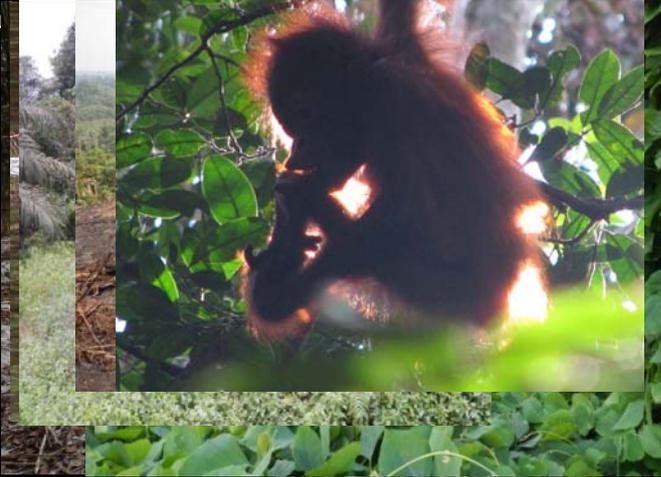
THREAT MONITORING IN PRACTICE



THREAT MONITORING IN PRACTICE



Gunungkidul, Gunungkidul Regency, Indonesia



DATA INPUT – THREAT MONITORING





Logging and wood harvesting (LW)

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            graph TD
            LW[Logging and wood harvesting (LW)] --> L[Logging site (L)]
            LW --> P[Prepared timber (P)]
            L --> S[Small trees cut only (S)]
            L --> L2[Large and small trees cut (L)]
            S --> State
            L2 --> State
            P --> State
            
```

State	New area, Expansion of existing area, Old logging area (<i>Logging site</i>)
Intensity	Chainsaw used? Number of large trees cut, Number of small trees cut (<i>Logging site</i>)
Action taken	Loggers approached, Logs removed, Report to management, No action (<i>Logging site</i>)
Notes	Are the loggers known, species impacted, type of loggers, was main stem cut, has wood been removed, presence of logging skids/canals (<i>Logging site</i>)

DATA INPUT – POST PATROL



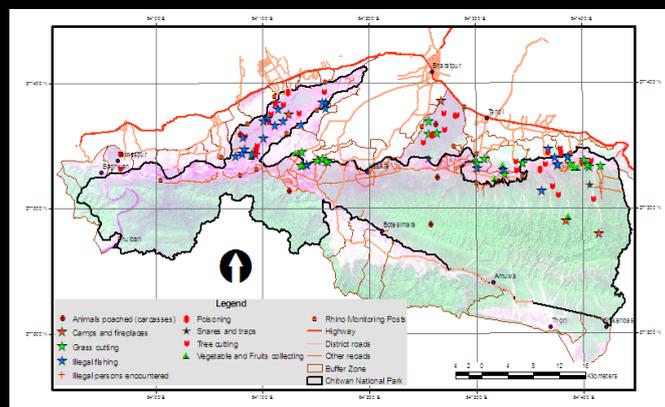
- Patrol tracks and waypoints are downloaded automatically
- Data entry is intuitive and easily taught to current staff
- Reporting can fit within current company structures



OUTPUTS – THREAT MONITORING



Threat distribution maps



OTHER MONITORING



- Habitat structure monitoring
- Freshwater monitoring
- Camera trapping
- Biodiversity



OUTCOMES – A PRACTICAL TOOL



- Complete, standardised and functional HCV monitoring protocol
- Software to analyse monitoring data and provide easy to understand information for adaptive management
- A fully developed training programme together with training modules and materials
- Increased capacity for plantations
- A reporting tool to demonstrate HCV protection
- Better oversight of the success of management activities and field staff
- A practical, systematic, easy to use, cheap, easy to train and verifiable system.



FUTURE POTENTIAL



- Increased level of statistical analysis (inclusion of Density, Capture etc.)
- Expansion of current modules (e.g. inclusion of soil erosion)
- Further modules (e.g. remote sensing data analysis tool)



THANK YOU



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