(-96) Not applicable

(-97) To be collected

(-98) Refused to answer

(-99) Missing

**IFRI FORM P July 2013**

**SHORT INSTRUMENT**

**FOREST PLOT FORM**

*Plots are demarcated areas useful for studying the ecology of a forest. IFRI researchers use them to identify the trees, saplings, and herbacious matter found in the forests they are examining. By carefully determining the number and distribution of plots, IFRI researchers can hypothesize how local populations use (or misuse) forest resources.*

*Plots, in other words, are the key link between the social and institutional data collected on most forms and the biological data collected in the forest(s). A plot can be any geometric shape. The IFRI manual guidelines explain the methods used for circles and squares. Be sure to* ***record the area in square meters below****; the field researcher should record below the Plot Identification Number that corresponds to this Forest Plot.*

Research ID<RID>:\_\_\_\_\_\_\_\_\_\_\_\_\_\_Country ID <CID>:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Site ID <SID>:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of site visit (dd-mm-yr):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of forest <FK\_FOREST>:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Plot identification number <PPIN>:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date data collected for this form (dd-mm-yr) <PPLOTDATE>:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**A. GEOGRAPHIC AND POSITIONING INFORMATION**

If using GPS technology to collect data for this section, all GPS units must be set to the same Datum and Spheroid while collecting data across all plots. Be sure to specify in the *Site Overview Form* (Form O) which Datum is being used across all plots.

*Use decimal degrees or degrees-minutes-seconds for latitude and longitude.*

A1. What is the latitude of this plot? <PLATITUDE>\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(decimal degrees)*

or

\_\_\_\_\_\_\_\_º \_\_\_\_\_\_\_\_’ \_\_\_\_\_\_\_\_" *(degrees-minutes-seconds)*

A2. What is the longitude of this plot? <PLONGITUDE>\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(decimal degrees)*

or

\_\_\_\_\_\_\_\_º \_\_\_\_\_\_\_\_’ \_\_\_\_\_\_\_\_" *(degrees-minutes-seconds)*

A3. What is the Dilution of Precision (DOP) for this position? <PDOP> \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Please enter a decimal number from 1 to 10.*

A4. What is the Estimated Position Error (EPE) for this position? <PEPE>

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Information for the following three questions is required for each plot so eventually it may be recorded on a GIS map of the forest. Information about the species and sizes of trees may be related to the elevation of the plot, the direction toward which the plot faces (e.g., primarily south facing or primarily northeast facing), and the steepness of the plot. A* ***clinometer*** *is typically used for measuring slope (steepness) in degrees.*

A5. Plot elevation in meters. <PELEVATION>:

A6. What is the steepness of the slope in degrees? <PSTEEP>

A7. If the plot is on a slope, what direction does the plot face? <PORIENT>

(1) \_\_\_\_ North

(2) \_\_\_\_Northeast

(3) \_\_\_\_East

(4) \_\_\_\_Southeast

(5) \_\_\_\_South

(6) \_\_\_\_Southwest

(7) \_\_\_\_ West

(8) \_\_\_\_Northwest

B. **CONDITIONS OF THE PLOT**

B1. Is there evidence of active soil erosion in the forest plot? <PEROSION>

***Mark only one answer.***

(0) \_\_\_\_No

(1) \_\_\_\_Yes, minor erosion; surface vegetation and humus layer are absent

(2) \_\_\_\_Yes, major erosion; large gullies are present in barren soil.

B2. Is there evidence of livestock use within the forest plot? <PLIVESTOCK>

***Mark only one answer.***

1. \_\_\_\_No
2. \_\_\_\_Yes

B3. Is there evidence of extreme damage by insects/pests within the forest plot? <PINSECTS>

***Mark only one answer.***

1. \_\_\_\_No
2. \_\_\_\_Yes

B4. Is there evidence of fire damage or charcoal burning? <PFIRE>

***Mark only one answer.***

1. \_\_\_\_No
2. \_\_\_\_Yes

B5. Is there evidence of organic matter –such as a soil hummus layer – on the forest floor ? <PORGANIC>

***Mark only one answer.***

1. \_\_\_\_No
2. \_\_\_\_Yes

B6. What is the percentage of crown cover in this plot? <PCROWN COV> \_\_\_\_\_\_\_\_\_\_%

**C.** **SHRUB, SAPLING, PALM, AND WOODY/HERBACEOUS CLIMBER INFORMATION**

Record the local and botanical names of each shrub, sapling, palm, and woody/herbaceous climber found in the circle of 3-meter radius. For shrubs and climbers, record **maximum diameter** and height in metric units. For saplings, record **DBH** and height in metric units. {P\_INFO}

*Starting at the center of the plot, create a circle with a 3-meter radius. For each sapling, shrub, palm, and woody/herbaceous climber species in this area, answer the questions below. Remember that a sapling is defined as a young tree with a DBH greater than 2.5 cm but less than 10 cm.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| What is the family name  of this plant species? | *Name of species*  *Botanical* | *Name of species*  *Local* | Is this a shrub,  sapling, palm, or  climber? Write "B" for  shrub, "P" for sapling,  "L" for palm, "W" for  woody climber. <P\_TYPE> | Maximum stem  diameter of the  shrub or climber,  or DBH of the  sapling (cm)  <P\_DBH> | Estimated  height of the  shrub or sapling  (not climbers)  (m)  <P\_HEIGHT> |
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**D. TREE, PALM, AND WOODY CLIMBER INFORMATION**

Record the local and botanical names of each tree, palm, and woody climber found in the circle of 10-meter radius. For each tree, record its DBH and height in metric units. {P\_INFO}

*Starting at the center of the plot, create a circle with a 10-meter radius. For each tree, palm, and woody climber species in this area, answer the questions below. Remember to record only those trees with a DBH greater than or equal to 10 cm. If possible, collect a sample of each unknown species.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| What is the family name  of this plant species? | *Name of species*  *Botanical* | *Name of species*  *Local* | Is this a tree,  palm, or woody  climber? Write  "T" for tree, "M"  for palm, or "C"  for woody  climber. <P\_TYPE> | Maximum  stem diameter  of the climber,  or DBH of the  tree (cm)  <P\_DBH> | Estimated  height of the  tree or palm  (not climbers)  (m)  <P\_HEIGHT> |
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