

FIA Soil Measurements Audit Form - 2002

ST	CTY	HEXAGON	MO	DAY	YR	TALLY1	TALLY2	TALLY3
XX	XXX	XXXXXXX	XX	XX	XXXX	XXXXXXX	XXXXXXX	XXXXXXX

Auditor(s): _____

Soil Sampling Site Measurements

A. Location of Soil Sampling Sites

- | | | | |
|----|---|-----|----|
| 1. | Soil sampling sites are correctly located on soil sampling line | Yes | No |
| 2. | Crew understands where to sample if this were(is) second sampling visit to plot | Yes | No |
| 3. | Crew understands where to sample if an obstacle is found at exact sampling site | Yes | No |

B. Forest Floor Layers

- | | | | |
|----|---|-----|----|
| 1. | Crew careful not to compact litter layer before measurement | Yes | No |
| 2. | Crew can distinguish if an organic soil layer is present in forest floor | Yes | No |
| 3. | Crew understands when to sample organic soil layer separately from the litter layer | Yes | No |
| 4. | Forest floor samples collected at only one location on plot and labeled correctly | Yes | No |

C. Mineral Surface Layers

- | | | | |
|----|--|-----|----|
| 1. | Crew was careful to collect samples for each layer (0-10;10-20 cm) | Yes | No |
| 2. | Crew did not inadvertently mix samples from the two layers | Yes | No |
| 3. | Depth to a restrictive horizon was properly measured | Yes | No |
| 4. | Soil sample bags were labeled correctly | Yes | No |

5. COMPLETE BULK DENSITY SAMPLING PROCEDURES AUDIT FORM - Next Page

D. Organic Soil Sampling

- | | | | |
|----|---|-----|----|
| 1. | Crew understands how to identify and sample an organic soil | Yes | No |
|----|---|-----|----|

Soil Erosion and Compaction Measurements

A. Soil Erosion Measurements

- | | | | |
|----|--|-----|----|
| 1. | Crew demonstrates an ability to estimate % bare soil | Yes | No |
|----|--|-----|----|

B. Soil Compaction Measurements

- | | | | |
|----|--|-----|----|
| 1. | Crew able to identify compacted soil on subplots (if not present, on way to plots) | Yes | No |
| 2. | Crew understands meanings of different soil compaction codes | Yes | No |

	Bare Soil (%)	% area compact	Evidence & Type
point __			
crew check			
point __			
crew check			

Audit Form - 2002

Bulk Density Sampling Procedures

Date of Audit: _____ Hexagon Number: _____
 Crew Member Audited: _____ Auditor: _____

<u>1. Locating sampling sites</u>	<u>Yes</u>	<u>No</u>	<u>N/A*</u>
a) Crew member went to correct sampling locations (soil visit #1 or2)	_____	_____	_____
b) Crew member understands how to relocate sampling site if an obstruction is found at the sampling location (move up to 5 ft any direction)	_____	_____	_____
c) If the soil is rocky, crew member understands how to use a small probe to locate a suitable site for sampling	_____	_____	_____
<u>2. Soil sampling equipment</u>			
a) Sampling equipment has been cleaned prior to going into field	_____	_____	_____
b) Complete set of sampling equipment has been taken into field including core sampler, slide hammer, crescent wrench, slip wrench, rings etc	_____	_____	_____
c) Sufficient sampling bags and labels	_____	_____	_____
<u>3. Soil core sampling</u>			
a) All equipment properly connected and tightened prior to sampling	_____	_____	_____
b) As corer is hammered into ground, a vertical angle is maintained	_____	_____	_____
c) If an obstruction is encountered, crew member understands that three attempts will be made to obtain a complete sample	_____	_____	_____
d) Core sampler inserted until top is 2.5 cm above the ground surface thus preventing any compaction of soil with the sampler	_____	_____	_____
e) In order to break soil sample off at bottom of core, slide hammer is used to gently rock core sampler. Hammer is down.	_____	_____	_____
e) Soil core sampler removed with minimal need to use upward hammering motion on slide hammer	_____	_____	_____
<u>4. Removal and labeling of cores</u>			
a) Core sampler is placed over a tarp prior to remove cores	_____	_____	_____
b) Lid of sampler is removed in such a manner as to prevent sample loss	_____	_____	_____
c) Cores are separated at correct depths with aid of a sharp knife	_____	_____	_____
d) Cores are placed immediately into soil sample bags	_____	_____	_____
e) Soil samples are correctly labeled	_____	_____	_____
f) Crew collects field duplicate samples once each 10 plots	_____	_____	_____

* N/A = Not applicable

Comments: _____

Reminder for auditor: Please collect at least one set of duplicate samples for each blind check (one litter / forest floor sample, one 0-10 cm and one 10-20 cm mineral or organic soil sample).