Ndimukulaga J.

FOREST DEPARTMENT

DRAFT FINAL REPORT
STOCKMAPPING TRAINING EXERCISE IN MABIRA FOREST RESERVE

12th September-11th November, 1994

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INTRODUCTION

Prior to 1970, Forest Department enjoyed an advanced system of Natural High Forest Management with well controlled working and harvesting plans. However, after 1970, there was gradual deterioration of the management systems due to the decline in resources available to the department. This resulted in a number of management operations including stockmapping not being practised.

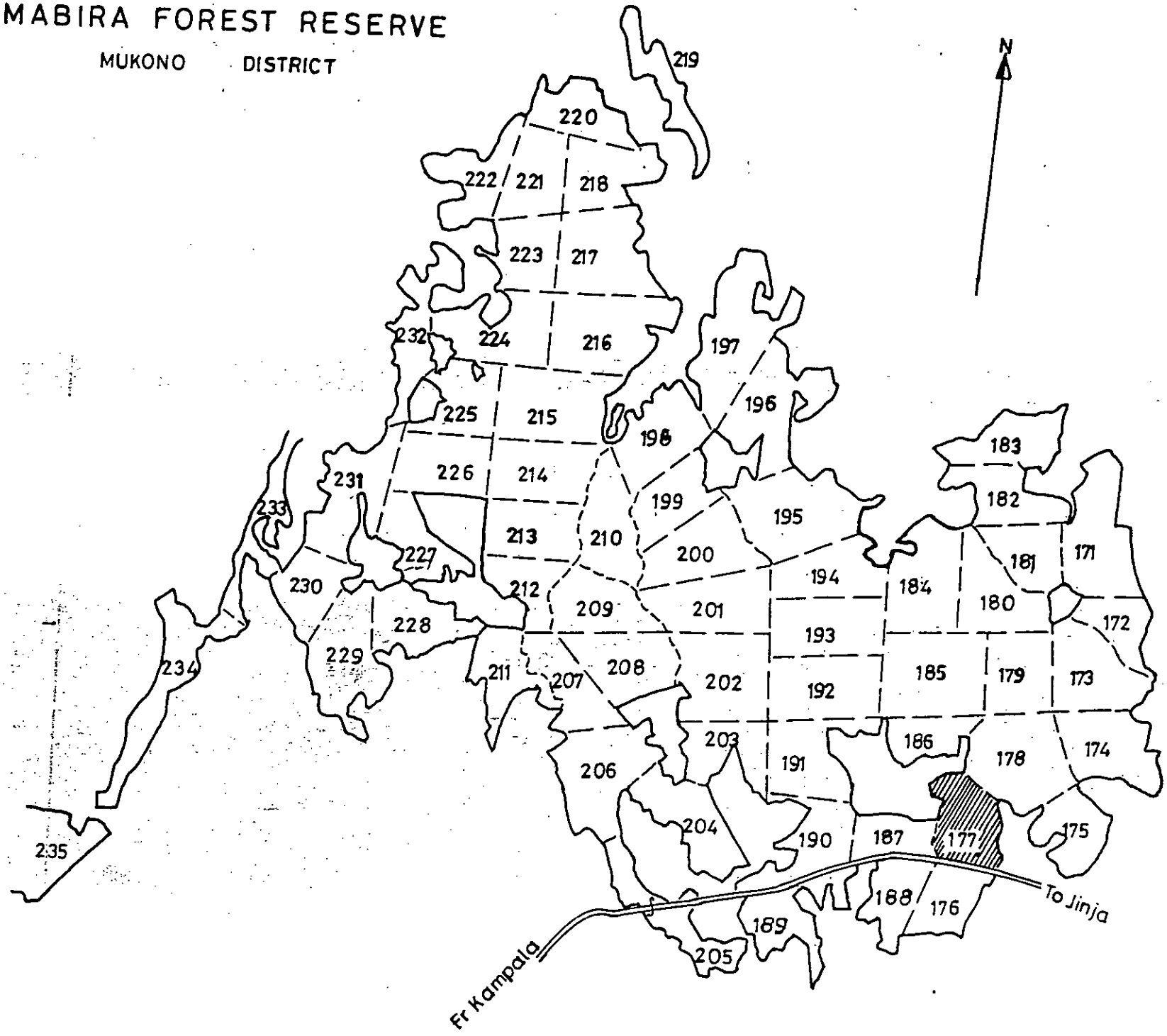
Although stockmapping has always been included in the syllabus for Nyabyeya Forestry College, there has not been effective practical training of the operation. In order to improve efficiency in logging practices and control, it is imperative that stockmapping is resuscitated. Section 6.54 - 6.64 of paper 3 of the Staff Appraisal Report on Natural Forest Management Rehabilitation Component of the Forest Rehabilitation Project which is supported by the EEC outlines the need and charges the Forest Department with the duty to re-introduce the traditional mechanism of controlling natural high forest harvesting while concurrently ensuring that the harvesting does not damage the ability of the forest to sustain production. It was with this in mind that Forest Department organised an in-service training course in stockmapping for 14 serving staff members and 2 retired Officers lasting 9 weeks with consultancy provided by the author.

The course consisted of a day's workshop at the Forest Department Headquarters, 36 days of field work and 8 days of analysis of results and stockmap production. Field work was done in Mabira Forest Reserve, compartment 177, covering an area of 103,6 ha for Budongo method and 82.4 ha for Block method.

This report describes the approach to the course and includes notes on stockmapping for both Budongo and Block methods for inclusion in the revised Departmental Standing Orders as well as Nyabyeya Forestry College curriculum (Annex 9).

MABIRA FOREST RESERVE

MUKONO DISTRICT



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WORKSHOP

A day's workshop was held at the Forest Department Headquarters on Monday 12th September,1994. It covered all aspects of stockmapping for both Budongo and Block methods. Instructions for the field work were prepared by the trainees for compartment 177 of Mabira Forest Reserve. A map to guide field operations was produced during the workshop.

FIELD WORK

Field work was carried out in compartment 177 of Mabira Forest Reserve. Since compartments in this reserve are not divided into coupes, for the purpose of stockmap production, this compartment was divided into four coupes I and II and commenced on Tuesday 13th September up to 1st November 1994. The team was divided into six groups of trainees each working with five forest workers.

Using the map and instructions prepared during the workshop at Nakawa, a base line was cut from the southern end of the compartment and running approximately North/South. Strip lines were cut at right angle to the base line and at 200m intervals. Block lines were cut at right angle to the strip lines and at intervals of 200m dividing the area into 4 ha. blocks. Guide lines were cut at right angle to the strip lines and at intervals of 50m giving three guide lines in each 4 ha block. Numbered pegs were placed along base, block and guide lines at 20 m intervals.

ENUMERATION

On the first day of enumeration, the team was divided into three groups for close supervision by the Consultant. Thereafter, the team reverted to the six groups of two trainees and five forest workers. All trees 50cm dbh and above were measured for diameter at breast height. Diameters for buttressed trees were measured above buttresses. All measured trees were physically numbered by inserting the number into the wood. The actual position of each tree on the ground was determined with reference to either base line, block line or guide line. 103.6 ha. were enumerated under Budongo method and 82.4 ha, under Block method.

Each trainee was given an opportunity to carry out a particular operation.

ANALYSIS OF THE RESULTS AND STOCKMAP PRODUCTION

Each group analyzed its results. The analyses from the six groups were combined to produce a final summary by species, number of stems, diameter classes according to fee groups and blocks. (Annex 2 for Budongo method and Annex 5 for Block method).

For stockmap production in the case of Budongo method, each group plotted its figures and a mosaic assembled with the six maps from which a final stockmap was produced, (Annex 12). For Block method, the data was presented in a diagrammatic form by blocks (Annex 10). Volume calculation for both methods was done by the inventory Section of the Forest Department. (Annexes 3 and 6).

OBSERVATION

Mabira forest inventory report, (Tindyebwa 1993) gives two forest types in this compartment namely, mixed forest mature, in the north and mixed forest with celtis dominance, in the south. Field work was done in the later. The area is reasonably stocked, 31 stems/ha, (87.7 m^3/ha), all species 50 cm dbh and above. As observed in the report, *celtis* dominates amounting to 32% of the stocking followed by *Albizzia* 17%, *Bosquiea* 9% and 43 other species making up the remaining 42%. Fee group I species amount to 6.9% (6.08m^3/ha), Fee group II, 76.8% (67.36m^3/ha) and fee group III, 16.3% (14.28m^3/ha). All species with dbh of 50 cm and above were recorded as being harvestable.

In the South Eastern side of the compartment, there is a new reserve boundary which is the one being maintained (Annex 1A). However, the new boundary is not shown on Mabira Forest Reserve maps. Instead the old boundary is shown (Annex 1B). This caused confusion when laying down the base line and strip lines on the ground until the old boundary was discovered.

There has been rampant illegal activities of charcoal burning, pitsawying and firewood cutting particularly in the western part of the compartment bordering the sugarcane plantation. Numerous charcoal burning, pitsawying and firewood cutting sites both old and new were found in this area. Tractor tracks used to collect illegal forest produce were a common sight. There has definitely been relaxation in patrolling inspite of the fact that part of the western boundary of the compartment bordering the sugar cane plantation is motorable. Species like *Measopsis, Olea* and *Holoptelia* which are in high demand by pitsawyers are getting extinct in the compartment. If the situation is the same in other compartments, considerable damage has been done to the reserve.

Revenue expected from the area stockmapped (186 ha) is as follows:-

Coupe I (88.7 ha)					
Fee group I	148	Trees,	538.93 m^3	Shs.	18,323,620
Fee group II	2,032	Trees,	5,974.86m^3		56,737,270.56
Fee group III	561	"	1,267.01m^3		7,425,312.10
Coupe II (97.3 ha)					
Fee group I	163 trees		591.19m^3	Shs	20,100,460.00
Fee group II	2,230 trees		6,554.16m^3		62,238,303.36
Fee group III	616 trees		1,389.85m^3		8,145,215.92
Total	5,750 trees		16,316,m^3	Shs	172,970.181.94

Revenue accruing per hectare, Shs. 929,947.21

Volume calculations is not a pre-requisite for putting to use the figures from stockmapping. However, it is a useful indicator of the value of the forest and it can be used as a check on the physical revenue from the field for the same area. Stockmapping being 100% enumeration with reference to the minimum felling diameter, volume obtained forms a good comparison with the inventory volume from which a conversion factor can be computed and used to convert inventory volumes to figures close to the actual standing volume.

Regarding the trainees, one retired Assistant Forest Officer had carried out block method of stockmapping and one Forest Ranger underwent practical training in Budongo method while still training at Nyabyeya Forestry College. All the trainees showed a lot of enthusiasm during the whole period of the course and each of them should be in a position to execute the operation successfully after this training.

RECOMMENDATIONS

1. Minimum felling diameters should be differentiated between slow growing, first growing and endangered species, those of first growing and endangered species being fairly high. The differentiation should be done before stockmapping commences in any other forest reserve.

2. The new reserve boundary in the South western part of compartment 177 should be drawn on all Mabira Forest Reserve maps to avoid possible future confusion during field operations.

3. For management purposes particularly harvesting control, compartments should be divided into coupes and stock maps produced for each coupe. A concessionaire should not be allowed to move out of a coupe until he/she has satisfactory harvested it.

4. During stockmapping, attempts should be made to select elite trees to remain behind after felling for regeneration seeding.

5. Budongo method of stockmapping should commence in Budongo Forest Reserve. Four groups of two trained staff each should be sent to Masindi to stockmap the four concessions of Ama-Ply, Budongo, Rwenzori and Kasensere sawmills. The stockmapping team should be directly under Headquarters. Stockmapping results should be sent to the District Forest Officers by the Commissioner for Forestry.

6. The rest of the trained staff should complete stockmapping of Mabira Forest Reserve before allowing harvesting to take place in the reserve.

7. Stockmapping should be strictly costed and when reliable costs are available, they should be incorporated in the timber fees during the adjustment of royalty carried out at six months intervals.

8 Although volume calculation is not a pre-requisite for putting to use the figures from stockmapping and since some forests have been inventoried thus having form heights calculated for the various species, volume should be computed by the inventory section from the information provided in annexes 4,7, and 8. However, application of stockmapping figures for harvesting purposes should not wait for volume calculation.

9 Annexes 3 and 6 are not part of the submission from the stockmapping team. Annex 11 as submitted by the stockmapping team will contain only number of trees by blocks. The submission from the stockmapping team will include:-

Budongo method

Annex 2
Annex 3
Annex 4
Annex 8
Annex 12

Block method

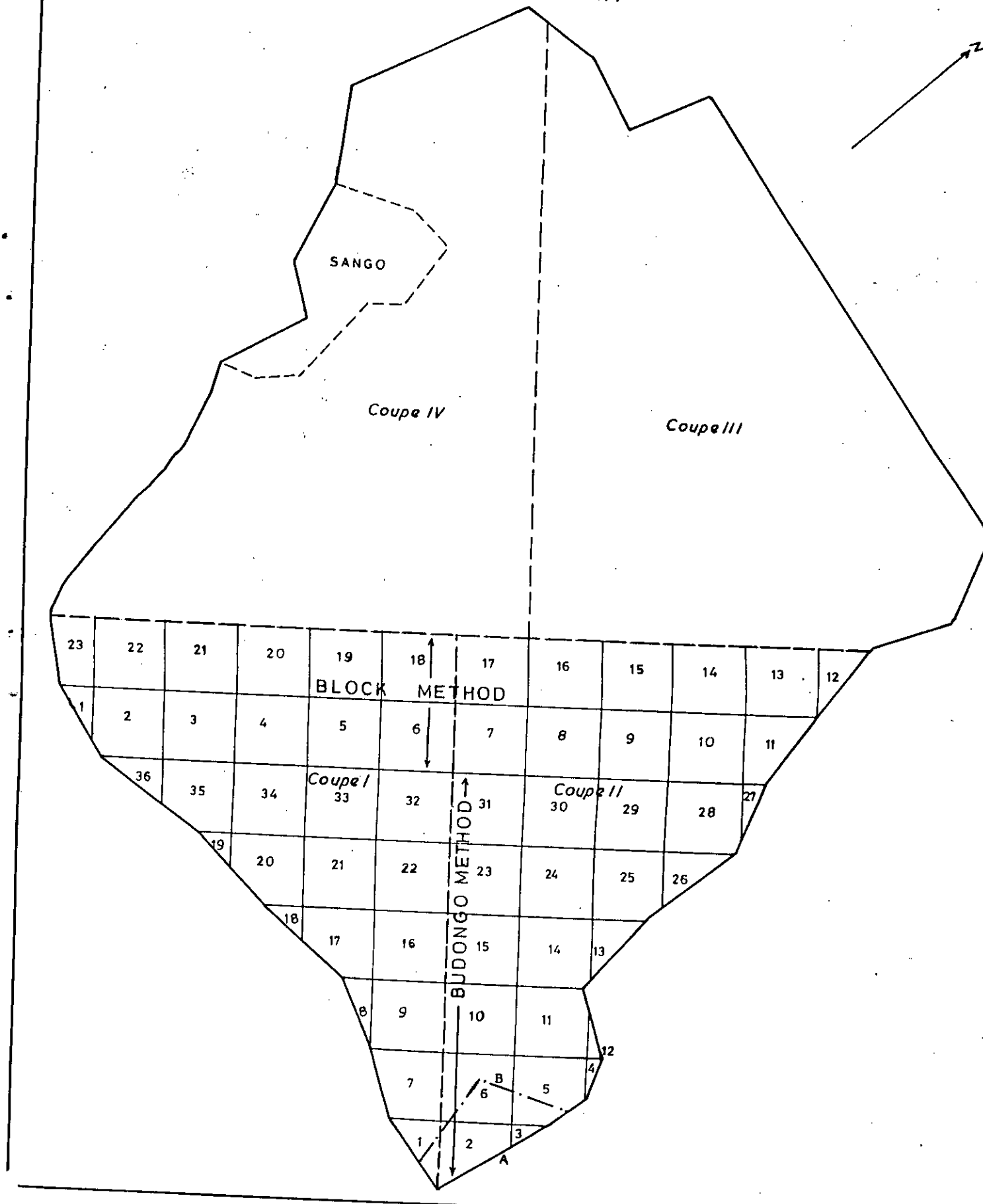
Annex 5
Annex 6
Annex 8
Annex 11 (excluding volume)

10 Patrolling and indeed forest protection should be intensified not only in Mabira but in all Forest Reserves country wide in order to curb down illegal activities. This calls for a story management and protection division at the Forest Department Headquarters able to monitor and follow up cases of illegal activities in the field.

MABIRA FOREST RESERVE

COMPARTMENT 177

ANNEX 1



ANNEX 2

STOCK MAPPING - MABIRA FOREST RESERVE
COMPARTMENT 177 (Part, 103.6 ha)
BUDONGO METHOD
SUMMARY BY DIAMETER CLASSES

GENERA	DIAMETER CLASSES						TOTAL (All classes) No.
	50-70 cm No.	71-90 cm No.	91-110 cm No.	111-130 cm No.	131-150 cm No.	151-170 cm No.	
Fee group I							
Entandrophragma	7	1	-	-	1	-	9
Fagara	41	6	-	-	-	-	47
Holoptelea	35	32	17	1	-	-	85
Lovoa	4	-	-	-	-	-	4
Milicia	7	5	1	-	-	-	13
Olea	7	1	1	1	-	-	10
Sub total fee group I	101	45	19	2	1	-	168
Fee group II							
Albizzia	381	135	19	3	-	-	538
Alstonia	24	20	9	2	-	-	55
Aningeria	20	10	7	3	1	-	41
Antiaris	61	39	5	2	-	1	108
Balanites	31	11	2	-	-	-	44
Canarium	3	-	-	-	-	-	3
Celtis	852	175	18	3	-	-	1048
Chrysophyllum	102	28	2	1	-	-	133
Cordia	13	5	3	-	-	-	21
Diospyros	38	2	-	-	-	-	40
Dombeya	2	-	-	-	1	-	3
Erythrina	3	1	-	-	-	-	4
Erythrophleum	1	-	-	-	-	-	1
Fagaropsis	5	1	-	-	1	-	7

BUDONGO METHOD

ANNEX 2

Fee group II cont'd

Funtumia	6	–	–	–	–	–	6
Markhamia	86	17	1	–	–	–	104
Mildbradiodendron	4	1	–	–	–	–	5
Morus	59	18	3	–	–	–	80
Polyscias	6	–	–	–	–	–	6
Prunus	54	14	1	1	–	–	70
Schrebera	1	–	–	–	–	–	1
Warburgia	10	2	–	1	–	–	13
Sub total fee group II	1762	479	70	16	3	1	2331
Fee group III							
Blighia	24	5	–	–	–	–	29
Bosquea	260	30	2	–	–	–	292
Cola	9	5	–	–	–	–	14
Croton	20	3	–	–	–	–	23
Ficus	102	41	13	11	8	–	175
Irvingia	1	–	–	–	–	–	1
Lannea	7	–	–	–	1	–	8
Lasiodiscus	3	1	–	–	–	–	4
Mimusops	16	3	1	1	–	–	21
Phyllanthus	46	7	1	–	–	–	54
Ricinodendron	7	–	–	–	–	–	7
Sapium	6	4	1	–	–	–	11
Trichilia	22	2	–	–	–	–	24
Unknown	6	3	–	–	–	–	9
Zanha	55	15	3	–	–	–	73
Sub total fee group III	584	119	21	12	9	–	745
GRAND TOTAL	2447	643	110	30	13	1	3244
Stocking/ha all species							31

ANNEX 3

STOCK MAPPING - MABIRA FOREST RESERVE
COMPARTMENT 177 (Part, 103.6 ha)
BUDONGO METHOD
SUMMARY BY VOLUME

GENERA	DIAMETER CLASSES							
	50-70 cm M³	71-90 cm M³	91-110 cm M³	111-130 cm M³	131-150 cm M³	151-170 cm M³	TOTAL M³	M³/ha
Fee group I								
Entandrophragma	20.35	5.48	-	-	17.99	-	43.82	0.42
Fagara	52.79	14.23	-	-	-	-	67.02	0.65
Holoptelea	98.60	158.01	124.80	12.21	-	-	393.62	3.80
Lovoa	5.66	-	-	-	-	-	5.66	0.05
Milicia	15.23	22.05	6.28	-	-	-	43.56	0.42
Olea	10.61	2.47	5.20	7.43	-	-	25.71	0.25
Sub total fee group I	203.24	202.24	136.28	19.64	17.99	-	579.39	5.59
Fee group II								
Albizzia	802.31	505.39	106.86	24.45	-	-	1439.01	13.89
Alstonia	55.74	87.02	62.75	19.22	-	-	224.73	2.17
Aningeria	50.16	41.98	50.3	29.5	13.39	-	185.33	1.79
Antiaris	155.72	190.79	40.08	21.93	-	22.01	430.53	4.16
Balanites	60.86	35.86	9.49	-	-	-	106.21	1.03
Canarium	5.14	-	-	-	-	-	5.14	0.05
Celtis	2208.37	837.9	132.98	132.98	-	-	3312.23	31.97
Chrysophyllum	225.02	110.01	12.72	9.16	-	-	356.91	3.45
Cordia	24.74	15.84	16.64	-	-	-	57.22	0.55
Diospyros	68.48	6.58	-	-	-	-	75.06	0.72
Dombeya	3.91	-	-	-	9.44	-	13.35	0.13
Erythrina	5.68	3.37	-	-	-	-	9.05	0.09
Erythrophleum	2.22	-	-	-	-	-	2.22	0.02
Fagaropsis	8.91	2.96	-	-	11.83	-	23.7	0.23

BUDONGO METHOD

ANNEX 3

Fee group II cont'd

Funtumia	7.16	-	-	-	-	-	7.16	0.07
Markhamia	160.05	55.18	5.97	-	-	-	221.2	2.14
Mildbradiodendron	8.55	2.96	-	-	-	-	11.51	0.11
Morus	104.82	56.37	15.05	-	-	-	176.24	1.70
Polyscias	9.15	-	-	-	-	-	9.15	0.09
Prunus	84.87	38.27	3.73	7.3	-	-	134.17	1.30
Schrebera	2.22	-	-	-	-	-	2.22	0.02
Warburgia	18.68	6.32	-	8.89	-	-	33.89	0.33
Sub total fee group II	4072.76	1996.8	456.57	253.43	34.66	22.01	6836.23	65.99
Fee group III								
Blighia	68.36	28.35	-	-	-	-	96.71	0.93
Bosquea	568.47	119.1	12.24	-	-	-	699.81	6.75
Cola	24.22	22.81	-	-	-	-	47.03	0.45
Croton	30.91	11.32	-	-	-	-	42.23	0.41
Ficus	174.17	128.66	64.86	80.75	83.91	-	532.35	5.14
Irvingia	0.96	-	-	-	-	-	0.96	0.01
Lannea	9.01	-	-	-	8.65	-	17.66	0.17
Lasiodiscus	2.96	2.11	-	-	-	-	5.07	0.05
Mimusops	21.29	8.21	4.65	5.54	-	-	39.69	0.38
Phyllanthus	48.15	13.79	3.3	-	-	-	65.24	0.63
Ricinodendron	11.74	-	-	-	-	-	11.74	0.11
Sapium	10.84	14.15	5.1	-	-	-	30.09	0.29
Trichilia	30.21	6.04	-	-	-	-	36.25	0.35
Unknown	8.97	6.78	-	-	-	-	15.75	0.15
Zanha	68.34	35.83	11.39	-	-	-	115.56	1.12
Sub total fee group III	1078.6	397.15	101.54	86.29	92.56	-	1756.14	16.95
GRAND TOTAL	5354.6	2596.19	694.39	359.36	145.21	22.01	9171.76	88.53

ANNEX 4

TREES ENUMARATED UNDER BUDONGO METHOD

Stock No.	DBH	Code No.	Stock No.	DBH	Code No.
1	58	(4)	47	66	(9)
2	55	(9)	48	57	(1)
3	63	(4)	49	130	(22)
4	67	(40)	50	57	(1)
5	60	(30)	51	70	(7)
6	55	(37)	52	64	(9)
7	66	(37)	53	62	(9)
8	67	(37)	54	73	(1)
9	57	(37)	55	78	(9)
10	61	(37)	56	55	(15)
11	59	(37)	57	53	(15)
12	63	(37)	58	110	(9)
13	85	(37)	59	62	(9)
14	62	(37)	60	50	(9)
15	72	(37)	61	70	(9)
16	69	(9)	62	50	(9)
17	63	(37)	63	80	(6)
18	63	(30)	64	63	(44)
19	76	(1)	65	50	(9)
20	54	(9)	66	70	(7)
21	105	(30)	67	100	(24)
22	60	(9)	68	60	(9)
23	64	(9)	69	73	(24)
24	54	(40)	70	70	(9)
25	50	(1)	71	60	(9)
[illegible]	60	(9)	72	80	(6)
27	56	(9)	73	70	(22)
28	52	(15)	74	67	(7)
29	51	(9)	75	69	(1)
30	50	(15)	76	56	(7)
31	65	(9)	77	55	(22)
32	65	(7)	78	80	(24)
33	50	(9)	79	60	(7)
34	56	(14)	80	56	(1)
35	53	(46)	81	60	(7)
36	62	(33)	82	68	(7)
37	65	(9)	83	80	(4)
38	65	(1)	84	59	(35)
39	65	(7)	85	66	(1)
40	90	(9)	86	55	(7)
41	76	(1)	87	55	(9)
42	70	(34)	88	60	(11)
43	110	(34)	89	50	(9)
44	76	(1)	90	64	(9)
45	60	(24)	91	50	(9)
46	51	(9)	92	52	(9)

Stock No.	DBH	Code No.
93	60	(7)
94	54	(7)
95	65	(24)
96	81	(1)
97	57	(7)
98	70	(7)
99	51	(15)
100	70	(9)
101	56	(30)
102	63	(40)
103	57	(9)
104	54	(9)
105	59	(9)
106	60	(7)
107	69	(1)
108	61	(9)
109	63	(46)
110	54	(1)
111	85	(9)
112	61	(9)
113	76	(1)
114	67	(11)
115	65	(9)
116	51	(9)
117	65	(9)
118	61	(1)
119	69	(9)
120	69	(7)
121	70	(9)
122	65	(2)
123	80	(2)
124	70	(9)
125	65	(9)
126	72	(9)
127	90	(24)
128	110	(2)
129	75	(9)
130	59	(4)
131	80	(4)
132	55	(9)
133	100	(1)
134	56	(9)
135	75	(9)
136	63	(7)
137	62	(9)
138	50	(7)
139	59	(9)
140	105	(24)
141	70	(9)
142	61	(1)
143	75	(9)
144	69	(9)
145	78	(9)
146	64	(9)
147	110	(22)
148	65	(1)
149	70	(24)
150	55	(4)
151	62	(30)
152	50	(30)
153	67	(9)
154	50	(9)
155	70	(20)
156	60	(37)
157	50	(37)
158	50	(37)
159	65	(37)
160	50	(37)
161	60	(37)
162	50	(9)
163	60	(37)
164	50	(2)
165	53	(9)
166	50	(37)
167	60	(37)
168	60	(30)
168	65	(37)
169	65	(37)
170	65	(37)
171	60	(37)
172	55	(13)
173	90	(37)
174	55	(9)
175	50	(9)
176	50	(9)
177	57	(36)
178	50	(9)
179	57	(45)
180	50	(1)
181	65	(1)
182	50	(30)
183	58	(1)
184	50	(40)
185	52	(1)
186	50	(7)
187	52	(1)
188	60	(1)
189	60	(9)
190	60	(5)
191	70	(1)
192	54	(9)
193	55	(7)

Stock No.	DBH	Code No.	Stock No.	DBH	Code No.
194	50	(33)	245	54	(1)
195	57	(9)	246	71	(3)
196	50	(17)	247	55	(9)
197	50	(33)	248	56	(7)
198	70	(9)	249	83	(9)
199	70	(24)	250	63	(1)
200	53	(1)	251	61	(7)
201	65	(21)	252	62	(1)
202	50	(6)	253	57	(22)
203	55	(37)	254	58	(9)
204	74	(37)	255	56	(1)
205	76	(37)	256	59	(1)
206	52	(45)	257	65	(7)
207	66	(37)	258	58	(30)
208	74	(30)	259	70	(9)
209	72	(9)	260	80	(9)
210	75	(9)	261	120	(3)
211	59	(26)	262	79	(1)
212	56	(37)	263	56	(9)
213	50	(9)	264	69	(3)
214	75	(21)	265	75	(9)
215	80	(9)	266	70	(9)
216	65	(9)	267	50	(30)
217	50	(9)	268	65	(22)
218	60	(9)	269	50	(9)
219	60	(9)	270	61	(20)
220	95	(9)	271	61	(9)
221	53	(9)	272	51	(9)
222	59	(14)	273	55	(9)
223	57	(9)	274	51	(46)
224	71	(3)	275	74	(9)
225	51	(7)	276	56	(7)
226	64	(9)	277	56	(9)
227	85	(12)	278	77	(11)
228	57	(21)	279	51	(9)
229	62	(15)	280	51	(9)
230	60	(9)	281	64	(1)
231	57	(20)	282	90	(22)
232	71	(12)	283	50	(9)
233	50	(7)	284	50	(6)
234	63	(9)	285	55	(7)
235	58	(3)	286	95	(22)
236	50	(7)	287	51	(24)
237	64	(12)	288	56	(9)
238	57	(7)	289	51	(21)
239	56	(9)	290	95	(1)
240	57	(3)	291	53	(1)
241	73	(1)	292	75	(7)
242	63	(7)	293	64	(1)
243	56	(1)	294	69	(1)
244	65	(9)	295	53	(4)

Stock No.	DBH	Code No.
296	50	(46)
297	50	(4)
298	56	(9)
299	52	(23)
300	73	(7)
301	74	(24)
302	69	(1)
303	57	(9)
304	76	(4)
305	56	(9)
306	63	(1)
307	83	(9)
308	82	(1)
309	63	(7)
310	62	(9)
311	61	(7)
312	65	(9)
313	54	(4)
314	50	(22)
315	60	(17)
316	71	(9)
317	53	(9)
318	72	(1)
319	74	(4)
320	75	(4)
321	50	(9)
322	81	(1)
323	54	(9)
324	54	(9)
325	52	(9)
326	60	(9)
327	57	(9)
328	62	(9)
329	60	(1)
330	50	(9)
331	62	(1)
332	56	(9)
333	59	(1)
334	70	(9)
335	64	(9)
336	78	(1)
337	65	(37)
338	50	(22)
339	67	(9)
340	50	(9)
341	63	(1)
342	60	(9)
343	67	(1)
344	52	(9)
345	50	(9)
346	51	(9)

Stock No.	DBH	Code No.
347	64	(9)
348	59	(7)
349	60	(9)
350	60	(9)
351	79	(9)
352	52	(9)
353	57	(1)
354	62	(1)
355	70	(9)
356	70	(1)
357	69	(1)
358	57	(4)
359	60	(1)
360	56	(9)
361	83	(24)
362	65	(9)
363	61	(9)
364	52	(9)
365	55	(33)
366	66	(46)
367	60	(9)
368	70	(9)
369	55	(9)
370	50	(33)
371	55	(9)
372	59	(9)
373	87	(37)
374	65	(37)
375	67	(37)
376	50	(9)
377	55	(7)
378	55	(33)
379	51	(9)
380	89	(14)
381	65	(31)
382	66	(22)
383	65	(6)
384	70	(33)
385	68	(33)
386	80	(9)
387	50	(22)
388	54	(7)
389	50	(1)
390	53	(7)
391	80	(4)
392	60	(7)
393	55	(15)
394	79	(9)
395	63	(33)
396	110	(24)
397	55	(7)

Stock No.	DBH	Code No.
398	82	(15)
399	66	(45)
400	55	(7)
401	52	(15)
402	55	(20)
403	59	(9)
404	75	(45)
405	52	(22)
406	59	(9)
407	62	(16)
408	50	(9)
409	60	(16)
410	71	(4)
411	50	(9)
412	134	(16)
413	57	(37)
414	55	(45)
415	75	(30)
416	55	(30)
417	52	(46)
418	56	(15)
419	65	(1)
420	69	(30)
421	59	(15)
422	55	(9)
423	61	(15)
424	70	(15)
425	57	(1)
426	50	(11)
427	60	(9)
428	60	(24)
429	61	(5)
430	63	(44)
431	80	(45)
432	51	(11)
433	100	(9)
434	64	(9)
435	58	(9)
436	50	(9)
437	71	(1)
438	75	(46)
439	64	(9)
440	50	(30)
441	54	(30)
442	59	(14)
443	50	(4)
444	77	(1)
445	52	(33)
446	62	(1)
447	59	(9)
448	65	(22)
449	60	(22)
450	65	(30)
451	62	(1)
452	65	(9)
453	70	(7)
454	64	(9)
455	69	(9)
456	62	(1)
457	60	(7)
458	51	(3)
459	80	(9)
460	65	(5)
461	57	(7)
462	75	(9)
463	57	(1)
464	90	(9)
465	74	(1)
466	59	(7)
467	53	(7)
468	100	(24)
469	51	(9)
470	63	(7)
471	50	(5)
472	61	(9)
473	66	(7)
474	66	(7)
475	60	(1)
476	60	(5)
477	50	(5)
478	50	(7)
479	57	(9)
480	71	(7)
481	56	(22)
482	80	(9)
483	60	(24)
484	50	(7)
485	65	(24)
486	55	(1)
487	52	(15)
488	60	(9)
489	65	(9)
490	51	(7)
491	76	(7)
492	63	(7)
493	76	(11)
494	61	(11)
495	64	(15)
496	65	(17)
497	64	(9)
498	67	(6)
499	71	(3)

Annex 9

The following information should be submitted to the District Forest Officer:

i) A summary by species, number of stems and diameter classes by fee groups.

ii) A table giving code numbers, tree numbers and dbh of the trees enumerated.

iii) Interpretation of the code numbers.

iv) Stockmap.

BLOCK METHOD

Preliminary Office Work

The same as Budongo method.

Field Work

Base, strip, block and guide lines are cut in the same way as for Budongo method except-that base, block and guide lines do not have pegs placed at 20m intervals. Enumeration is done in the same way as for Budongo method, but in this case the Forest Guard is not required and the actual position of the tree is not located.

Analysis of the results and stockmap production

A summary of the stockmapping results is made by species, number of stems, diameter classes and fee groups according to blocks. Data is presented in a diagrammatic form by blocks.

The following information should be submitted to the District Forest Officer:

i) A summary by species, number of stems, diameter classes and fee groups according to blocks.

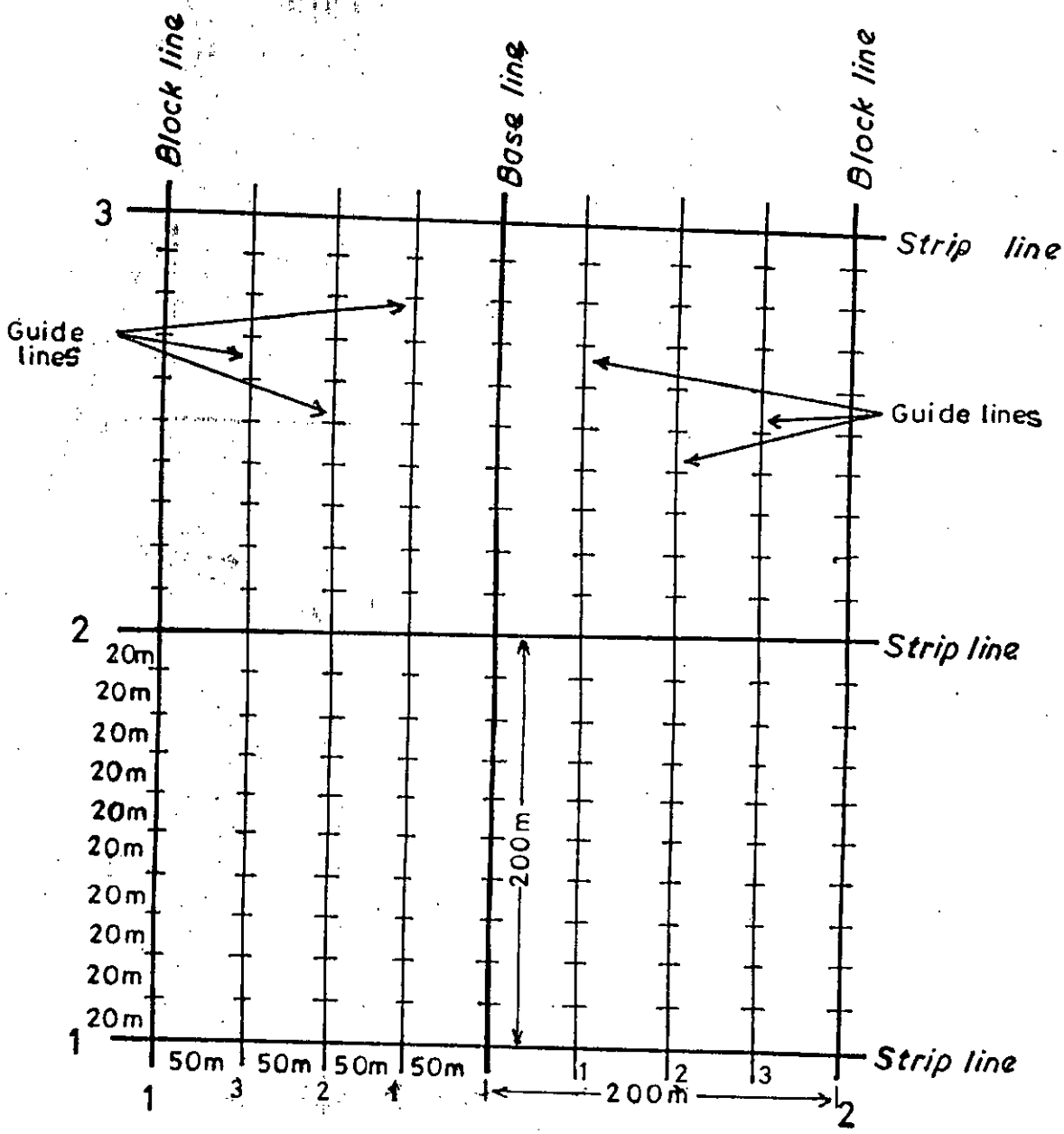
ii) A table giving code numbers, tree numbers and dbh of the tree enumerated.

iii) Interpretation of the code numbers.

iv) Diagrammatic presentation of the data by blocks.

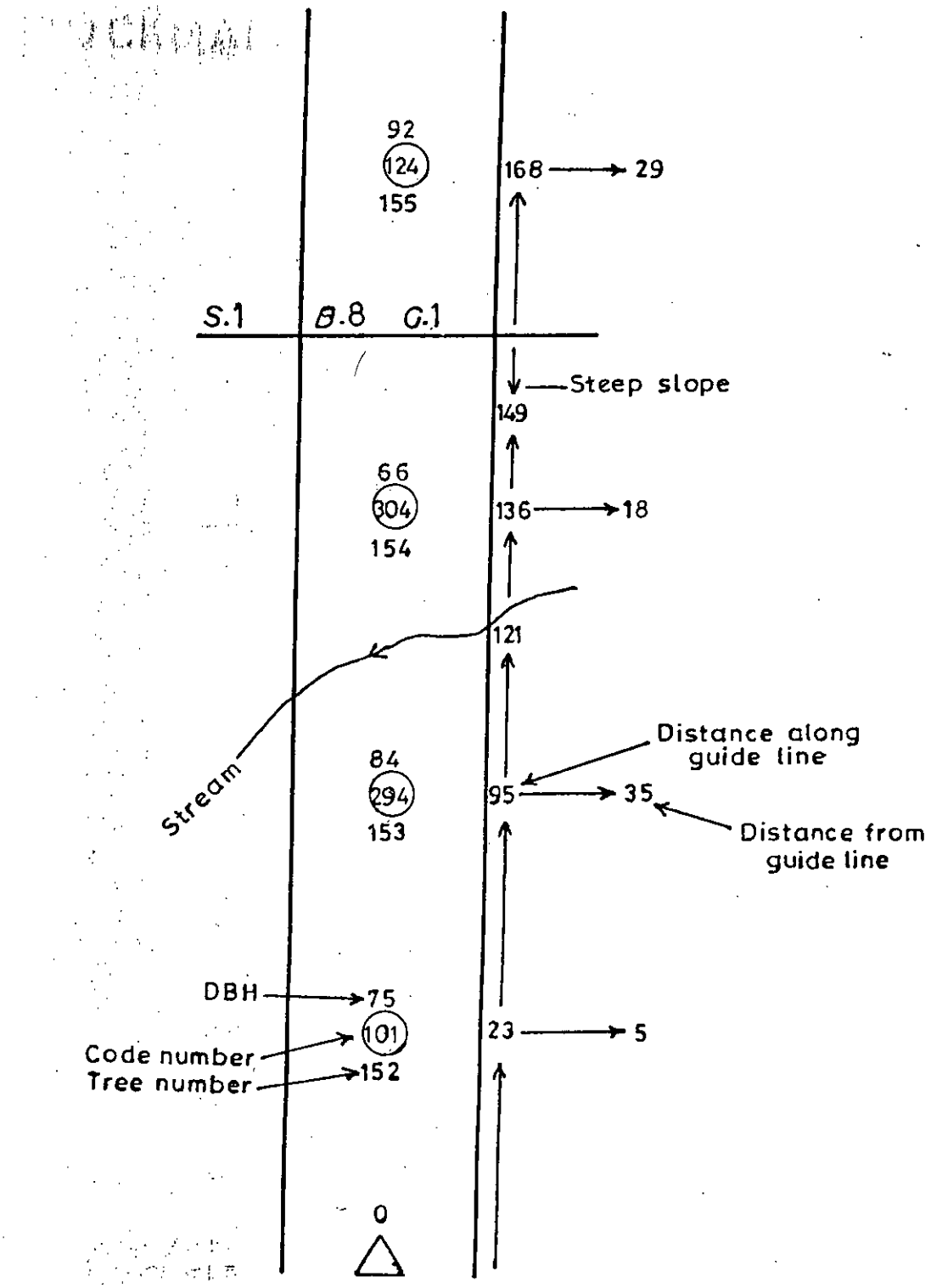
STOCKMAPPING

FIELD LAYOUT OF BASE LINE, BLOCK AND GUIDE LINES



STOCKMAPPING — BUDONGO METHOD

FIELD BOOK



MABIRA FOREST RESERVE, COMPARTMENT 177

COUPE II

Stockmapping Equipment

Preliminary Office work

- Reserve map - divided into compartment and coupes
- Scale rule
- Setsquare
- Protractor
- Graph paper
- Plain drawing paper
- HP Pencil
- Rubber

Fieldwork

- 50m measuring chain
- Prismatic compass
- Optical square
- Numbering hammer
- Diameter tapes
- Climbing ladder or staff for measuring diameter above buttresses.
- Coloured ribbons.
- Field book
- HB pencil
- Rubber
- Pangas.

Plotting

- Scale rule
- Set square
- Protractor
- Graph paper
- Plain drawing paper
- Drawing pins
- HB pencil
- Rubber

SPECIES LIST TO BE USED FOR FUTURE STOCK MAPPING

1. Species list by code numbers

Fee Group I

102 Chlorophora excelsa
103 Entandrophragma angolense
104 Entandrophragma cylindricum
105 Entandrophragma excelsa
106 Entandrophragma utile
107 Fagara leprieurii
108 Fagara macrophylla
109 Fagara mildbraedii
110 Khaya anthotheca
111 Khaya grandiflora
112 Khaya senegalensis
113 Lovoa trichilioides
114 Lovoa swynnertonii
115 Olea welwitschii
116 Afzelia africana
117 Guarea cedrata
118 Hagenia abyssinica
119 Holoptelea grandis
120 Mitragyna rubrostipulata
121 Mitragyna stipulosa
122 Ocotea usambarensis
123 Olea africana
124 Olea hochstetteri
125 Podocarpus gracilior
126 Podocarpus milanjianus
127 Podocarpus usambarensis

Fee Group II

201 Albizzia coriaria
202 Albizzia ferruginea
203 Albizzia grandibracteata
204 Albizzia gummifera
205 Albizzia zygia
206 Carape grandiflora
207 Cordia millenii
208 Fagaropsis angolensis
209 Ficalhoa laurifolia
211 Maesopsis eminii
212 Markhamia platycalyx
216 Newtonia buchananii
219 Piptadeniastrum africanum
220 Prunus africana
221 Symphonia globulifera
222 Trichilia dregeana
223 Alangium chinense
224 Albizzia adianthifolia
225 Albizzia glaberrima
226 Allophylus abyssinicus
227 Allophylus macrobotrys
228 Alstonia boonei
229 Aningeria adolfi-friederici
230 Aningeria altissima
231 Antiaris toxicaria
232 Balanites wilsoniana
233 Canarium schweinfurthii
234 Cassia mannii
235 Cathormiom altissimum
236 Celtis adolfi-frederici
237 Celtis africana
238 Celtis durandii
239 Celtis integrifolia
240 Celtis milbraedii
241 Celtis zenkeri
242 Celtis wightii
243 Chrysophyllum albidum
244 Chrysophyllum goruggosanum
245 Chrysophyllum mnerense
246 Chrysophyllum pentagonocarpum
247 Chrysophyllum perpulchrum
248 Cordia africana
249 Cynometra alexandri
250 Diospyros abyssinica
251 Diospyros mespiliformis
252 Dombeya bagshawei
253 Dombeya goetzenii
254 Dombeya mukole
255 Drypetes spp.
256 Ekebergia canpensis
257 Ekebergia senegalensis
258 Erythrina abyssinnica
259 Erythrina excelsa
260 Erythrina mildbraedii
261 Erythrophleum suaveolens
262 Faurea saligna
263 Funtumia africana
264 Funtumia elastica
265 Ilex mitis
266 Macaranga kilimandscharica
267 Macaranga lancifolia
268 Macaranga monandra
269 Macaranga schweinfurthii
270 Milbraediodendron excelsum
271 Morinda lucida
272 Morus lactea
273 Musanga cecropoides
274 Myrianthus holstii
275 Myrianthus salicifolia
276 Nauclea diderrichii
277 Parinari excelsa
278 Parkia filicoidea
279 Polyscias fulva
280 Premna angolensis
281 Pseudospondias microcarpa

282 Pterygota mildbraedii
283 Pycnanthus angolensis
284 Schrebera alata
285 Schrebera arborea
286 Spathodea campanulata
287 Sterculia dawei
288 Sterculia setigera
289 Syzigium guineense
290 Tetrapleura tetraptera
291 Warburgia ugandensis
292 Acacia spp.
293 Juniperus grandis

Fee Group III

304 Baikiaea insignis
316 Strombosia scheffleri
399 Klainedoxa gabunensis

Fee Group IV

401 Afrosersalisia cerasifera
402 Afzelia bipindensis
405 Allanblackia kimbiliensis
409 Anthocleista vogelii
410 Anthocleista grandiflora
411 Anthocleista schweinfurthii
412 Antrocaryon micraster
413 Aphania senegalensis
414 Apodytes dimidiata
416 Balsamocitrus dawei
417 Balthasaria schliebenii
418 Beilschmiedia ugandensis
419 Bequaertiodendron oblanceolatum
420 Blighia unijugata
421 Blighia welwitschii
422 Bombax buonopozense
423 Bosquiea phoberos
424 Bridelia ndellensis
425 Bridelia micrantha
426 Casearia battiscombei
427 Casearia engleri
429 Cassipourea melanosa
430 Cassipourea gummifera
431 Catha edulis
439 Cleistopholis patens
442 Cola gingatea
443 Crossonephelis africanus
444 Croton macrostachys
445 Croton megalocarpus
446 Cussonia holstii
448 Danniellia oliveri
449 Desplatsia dewevrei
450 Dialium excelsum
451 Dichaetanthera corymbosa
456 Ehretia cymosa

459 Elaeodendron buchananii
460 Elaephorbia drupifera
463 Euphorbia obovalifolia
465 Ficus spp.
468 Gabunia odoratissima
469 Garcinia millensis
470 Greenwayodendron suaveolens
473 Hannoa longipes
474 Haronga madagascariensis
476 Irvingia gabonensis
477 Lannea welwitschii
479 Lecaniodiscus cupanioides
480 Lecaniodiscus fraxinifolius
481 Leplaea mayombensis
482 Lychnodiscus cerospermus
487 Majidea fosteri
488 Mammea africana
489 Manilkara butugi
490 Manilkara obovata
491 Manilkara dawei
492 Millettia dura
493 Mimusops bagshawei
494 Mondora myristica
501 Neoboutonia macrocalyx
502 Neogordonia kabrigrensis
503 Ochna holstii
504 Olinia usambarensis
505 Pachystela brevipes
506 Pachystela msolo
509 Parposia guineensis
510 Phyllanthus discoideus
511 Picralima nitida
512 Pittosporum viridiflorum
517 Rapanea spp.
518 Rauvolfia oxyphylla
519 Ricinodendron heudelotii
520 Rinorea ilicifolia
521 Sapium ellipticum
522 Schefflera abyssinica
523 Schefflera volkensii
527 Spondianthus preussii
528 Staudtia stipitata
530 Strychnos mitis
532 Tabernaemontana holstii
533 Tabernaemontana johnstonii
534 Tebernaemontana usambarensis
535 Tamarindus indica
536 Tapura fisheri
537 Teclea nobilis
538 Terminalia brownii
540 Tetrorchidium didymostemon
541 Treculia africana
542 Trema orientalis
543 Trichilia emetica
544 Trichilia martineana
545 Trichilia prieuriana
546 Trichilia rubescens
547 Turreanthus africanus
548 Uapaca guineensis

549 Uvariopsis congensis
550 Vitex amboniensis
551 Voacanga thonarsii
553 Xylopia aethiopica
554 Xylopia parviflora
555 Xymalos monispora
556 Zanha golungensis
557 Bragglia longipedicellata
558 Coffea spp.
560 Linociera johnsonii
561 Ritchiea albersii
562 Turraea floribunda
564 Caloncoba schweinfurthii
565 Dictyandra arborescens
566 Glyphaea brevis
567 Lasiodiscus mildbraedii
568 Mystroxylon aethiopicum
569 Dichrostachys cinerea
570 Chaetacme aristata
571 Combretum spp.
572 Canthium spp.
574 Oncoba sp.
575 Polyalthia sp.
576 Afrocrania volkensii
578 Vangueria spp.
579 Nuxia congesta

2. Species in alphabetical order of botanical name

292 Acacia spp.
582 Acanthus spp.
576 Afrocrania volkensii
401 Afrosersalisia cerasifera
116 Afzelia africana
402 Afzelia bipindensis
223 Alangium chinense
224 Albizzia adianthifolia
201 Albizzia coriaria
202 Albizzia ferruginea
225 Albizzia glaberrima
203 Albizzia grandibracteata
204 Albizzia gummifera
205 Albizzia zygia
405 Allanblackia kimbiliensis
226 Allophylus abyssinicus
227 Allophylus macrobotrys
228 Alstonia boonei
229 Aningeria adolfi-friederici
230 Aningeria altissima
410 Anthocleista grandiflora
411 Anthocleista schweinfurthii
409 Anthocleista vogelii
231 Antiaris toxicaria
592 Antidesma laciniatum
412 Antrocaryon micraster
413 Aphania senegalensis
580 Euclea divinorum
581 Maytenus sp.
582 Acanthus spp.
583 Maerua duchensii
587 Trichilia spp.
588 Cleistanthus polystachus
589 Pittosporum spathicalyx
591 Hymenocardia acida
592 Antidesma laciniatum
593 Pittosporum ripicola
594 Guarea mayombensis
595 Pauridiantha holstii
596 Strombosia toroenzis
597 Peddiea fisheri
598 Craterispermun laukinum
599 Kigelia africana
601 Steganotaenia araliacea
603 Bridelia brideliifolia
604 Croton oxypetalus
605 Teclea ang.
606 Ouratea spp.
607 Rauvolfia caffra
610 Tarenna spp.
611 Poemna ang.
612 Linociera latipetala

414 Apodytes dimidiata
304 Baikiaea insignis
232 Balanites wilsoniana
416 Balsamocitrus dawei
417 Balthasaria schliebenii
418 Beilschmiedia ugandensis
419 Bequaertiodendron oblanceolatum
420 Blighia unijugata
421 Blighia welwitschii
422 Bombax buonopozense
423 Bosquiea phoberos
557 Bragglia longipedicellata
603 Bridelia brideliifolia
425 Bridelia micrantha
424 Bridelia ndellensis
564 Caloncoba schweinfurthii
233 Canarium schweinfurthii
572 Canthium spp.
206 Carape grandiflora
426 Casearia battiscombei
427 Casearia engleri
234 Cassia mannii
430 Cassipourea gummifera
429 Cassipourea melanosa
431 Catha edulis
235 Cathormiom altissimum
236 Celtis adolfi-frederici

237 Celtis africana
238 Celtis durandii
239 Celtis integrifolia
240 Celtis milbraedii
242 Celtis wightii
241 Celtis zenkeri
570 Chaetacme aristata
102 Chlorophora excelsa
243 Chrysophyllum albidum
244 Chrysophyllum goruggosanum
245 Chrysophyllum mnerense
246 Chrysophyllum pentagonocarpum
247 Chrysophyllum perpulchrum
588 Cleistanthus polystachus
439 Cleistopholis patens
558 Coffea spp.
442 Cola gingatea
571 Combretum spp.
248 Cordia africana
207 Cordia millenii
598 Craterispermun laukinum
443 Crossonephelis africanus
444 Croton macrostachys
445 Croton megalocarpus
604 Croton oxypetalus
446 Cussonia holstii
249 Cynometra alexandri
448 Danniellia oliveri
449 Desplatsia dewevrei
450 Dialium excelsum
451 Dichaetanthera corymbosa
569 Dichrostachys cinerea
565 Dictyandra arborescens
250 Diospyros abyssinica
251 Diospyros mespiliformis
252 Dombeya bagshawei
253 Dombeya goetzenii
254 Dombeya mukole
255 Drypetes spp.
456 Ehretia cymosa
256 Ekebergia canpensis
257 Ekebergia senegalensis
459 Elaeodendron buchananii
460 Elaephorbia drupifera
103 Entandrophragma angolense
104 Entandrophragma cylindricum
105 Entandrophragma excelsa
106 Entandrophragma utile
258 Erythrina abyssinnica
259 Erythrina excelsa
260 Erythrina mildbraedii
261 Erythrophleum suaveolens
580 Euclea divinorum
463 Euphorbia obovalifolia
107 Fagara leprieurii
108 Fagara macrophylla
109 Fagara mildbraedii
208 Fagaropsis angolensis

262 Faurea saligna
209 Ficalhoa laurifolia
465 Ficus spp.
263 Funtumia africana
264 Funtumia elastica
468 Gabunia odoratissima
469 Garcinia millensis
566 Glyphaea brevis
470 Greenwayodendron suaveolens
117 Guarea cedrata
594 Guarea mayombensis
118 Hagenia abyssinica
473 Hannoa longipes
474 Haronga madagascariensis
119 Holoptelea grandis
591 Hymenocardia acida
265 Ilex mitis
476 Irvingia gabonensis
293 Juniperus grandis
110 Khaya anthotheca
111 Khaya grandiflora
112 Khaya senegalensis
599 Kigelia africana
399 Klainedoxa gabunensis
477 Lannea welwitschii
567 Lasiodiscus mildbraedii
479 Lecaniodiscus cupanioides
480 Lecaniodiscus fraxinifolius
481 Leplaea mayombensis
560 Linociera johnsonii
612 Linociera latipetala
114 Lovoa swynnertonii
113 Lovoa trichilioides
482 Lychnodiscus cerospermus
266 Macaranga kilimandscharica
267 Macaranga lancifolia
268 Macaranga monandra
269 Macaranga schweinfurthii
583 Maerua duchensii
211 Maesopsis eminii
487 Majidea fosteri
488 Mammea africana
489 Manilkara butugi
491 Manilkara dawei
490 Manilkara obovata
212 Markhamia platycalyx
581 Maytenus sp.
270 Milbraediodendron excelsum
492 Millettia dura
493 Mimusops bagshawei
120 Mitragyna rubrostipulata
121 Mitragyna stipulosa
494 Mondora myristica
271 Morinda lucida
272 Morus lactea
273 Musanga cecropoides
274 Myrianthus holstii
275 Myrianthus salicifolia

568 Mystroxylon aethiopicum
276 Nauclea diderrichii
501 Neoboutonia macrocalyx
502 Neogordonia kabrigrensis
216 Newtonia buchananii
579 Nuxia congesta
503 Ochna holstii
122 Ocotea usambarensis
123 Olea africana
124 Olea hochstetteri
115 Olea welwitschii
504 Olinia usambarensis
574 Oncoba sp.
606 Ouratea spp.
505 Pachystela brevipes
506 Pachystela msolo
277 Parinari excelsa
278 Parkia filicoidea.
509 Parposia guineensis
595 Pauridiantha holstii
597 Peddiea fisheri
510 Phyllanthus discoideus
511 Picralima nitida
219 Piptadeniastrum africanum
593 Pittosporum ripicola
589 Pittosporum spathicalyx
512 Pittosporum viridiflorum
125 Podocarpus gracilior
126 Podocarpus milanjianus
127 Podocarpus usambarensis
611 Poemna ang.
575 Polyalthia sp.
279 Polyscias fulva
280 Premna angolensis
220 Prunus africana
281 Pseudospondias microcarpa
282 Pterygota mildbraedii
283 Pycnanthus angolensis
517 Rapanea spp.
607 Rauvolfia caffra
518 Rauvolfia oxyphylla
519 Ricinodendron heudelotii
520 Rinorea ilicifolia
561 Ritchiea albersii
521 Sapium ellipticum
522 Schefflera abyssinica
523 Schefflera volkensii
284 Schrebera alata
285 Schrebera arborea
286 Spathodea campanulata
527 Spondianthus preussii
528 Staudtia stipitata
601 Steganotaenia araliacea
287 Sterculia dawei
288 Sterculia setigera
316 Strombosia scheffleri
596 Strombosia toroenzis
530 Strychnos mitis
221 Symphonia globulifera
289 Syzigium guineense
532 Tabernaemontana holstii
533 Tabernaemontana johnstonii
535 Tamarindus indica
536 Tapura fisheri
610 Tarenna spp.
534 Tebernaemontana usambarensis
605 Teclea ang.
537 Teclea nobilis
538 Terminalia brownii
290 Tetrapleura tetraptera
540 Tetrorchidium didymostemon
541 Treculia africana
542 Trema orientalis
222 Trichilia dregeana
543 Trichilia emetica
544 Trichilia martineana
545 Trichilia prieuriana
546 Trichilia rubescens
587 Trichilia spp.
562 Turraea floribunda
547 Turreanthus africanus
548 Uapaca guineensis
549 Uvariopsis congensis
578 Vangueria spp.
550 Vitex amboniensis
551 Voacanga thonarsii
291 Warburgia ugandensis
553 Xylopia aethiopica
554 Xylopia parviflora
555 Xymalos monispora
556 Zanha golungensis

ANNEX 10

STOCK MAPPING - MABIRA FOREST RESERVE

COMPARTMENT 177 (Part 82.4 ha)

BLOCK METHOD

DIAGRAMATIC PRESENTATION OF THE DATA

B23			B22			B21			B20			B19			B18			B17			B16			B15			B14			B13			B12		
	NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³
1	1	2.11	1	7	21.05	1	4	7.23	1	8	42.09	1	9	28.73	1	1	5.49	1	5	11.49	1	11	39.63	1	4	37.29	1	9	39.65	1	4	14.28	1		
2	38	112.71	2	79	225.07	2	132	371.27	2	95	301.28	2	99	346.89	2	105	313.00	2	141	403.64	2	129	332.74	2	104	343.73	2	59	167.33	2	36	109.16	2	4	10.
3	22	46.38	3	31	66.01	3	14	24.15	3	7	12.94	3	19	48.38	3	22	49.62	3	14	28.35	3	23	44.00	3	18	39.35	3	16	43.19	3	11	24.77	3		

B1			B2			B3			B4			B5			B6			B7			B8			B9			B10			B11		
	NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³		NT	M³
1	1	1.33	1	15	42.40	1	4	13.86	1	7	25.28	1	9	124.15	1	5	16.92	1	5	20.25	1	6	27.87	1	5	27.07	1	16	78.41	1	7	29.67
2	23	61.02	2	91	247.32	2	121	377.91	2	85	257.98	2	52	49.38	2	131	391.31	2	154	432.55	2	83	259.17	2	82	245.88	2	55	158.81	2	33	99.68
3	12	21.86	3	21	45.95	3	18	37.06	3	14	34.00	3	16	192.14	3	27	64.05	3	18	33.71	3	22	39.12	3	24	65.24	3	52	53.48	3	11	29.19

B = Block

NT = Number of Trees

M³ = Volume in Cubic Metres

1 = Fee Group I

2 = Fee Group II

3 = Fee Group III

ANNEX 11

LIST OF PARTICIPANTS

1	N.D. Tindyebwa	–	Forest Department Headquarters
2	J. Mbonye	–	Forest Department Headquarters
3	B. Kiwanuka	–	Forest Department Headquarters
4	P.A.W. Osubia	–	Forest Department Headquarters
5	E. Shabombwe	–	District Forest Officer, Mukono
6	X. Mugumya	–	Forest Officer, Mabira Forest Reserve
7	M. Ilukor	–	Forest Ranger, Mukono
8	E. Were	–	Forest Ranger, Mukono
9	D.E. Arinaitwe	–	Forest Ranger, Mukono
10	M. Mutelaba-Namulaba	–	Forest Ranger, Mukono
11	C. Moddi	–	Forest Ranger, Mukono
12	T. Khabusi	–	Forest Ranger, Mbale
13	F. Byabagambi	–	Forest Ranger, Mbarara
14	G.W. Tumwesigye	–	Forest Ranger, Ntungamo
15	C.W. Wabbi-Kizito	–	C/o District Forest Officer, Mukono
16	P. Gabula	–	C/o District Forest Officer, Kamuli

Stock No.	DBH	Code No.
3129	83	(14)
3130	65	(1)
3131	54	(4)
3132	60	(7)
3133	84	(9)
3134	68	(9)
3135	61	(9)
3136	60	(14)
3137	62	(1)
3138	50	(14)
3139	52	(9)
3140	70	(1)
3141	50	(9)
3142	51	(9)
3143	75	(13)
3144	70	(1)
3145	58	(22)
3146	75	(30)
3147	55	(46)
3148	60	(9)
3149	90	(9)
3150	65	(11)
3151	52	(11)
3152	56	(26)
3153	87	(1)
3154	50	(9)
3155	50	(2)
3156	52	(9)
3157	50	(1)
3158	78	(33)
3159	54	(1)
3160	74	(1)
3161	50	(9)
3162	52	(1)
3163	78	(5)
3164	78	(46)
3165	80	(22)
3166	64	(22)
3167	60	(1)
3168	58	(1)
3169	62	(1)
3170	80	(1)
3171	60	(9)
3172	84	(2)
3173	55	(1)
3174	89	(1)
3175	86	(30)
3176	75	(1)
3177	63	(33)
3178	58	(9)
3179	78	(11)

Stock No.	DBH	Code No.
3180	98	(9)
3181	56	(9)
3182	64	(46)
3183	94	(9)
3184	56	(9)
3185	65	(44)
3201	60	(9)
3202	60	(9)
3203	77	(11)
3204	75	(9)
3205	76	(1)
3206	66	(9)
3207	82	(1)
3208	56	(9)
3209	62	(7)
3210	82	(9)
3211	58	(9)
3212	83	(24)
3213	66	(9)
3214	63	(1)
3215	80	(9)
3216	90	(24)
3217	70	(5)
3218	65	(9)
3219	71	(1)
3220	54	(1)
3221	93	(9)
3222	70	(9)
3223	72	(11)
3224	72	(9)
3225	80	(1)
3226	53	(9)
3227	64	(9)
3228	65	(1)
3229	73	(9)
3230	68	(1)
3231	62	(7)
3232	63	(1)
3233	80	(4)
3234	88	(1)
3235	60	(1)
3236	67	(9)
3237	72	(1)
3238	80	(1)
3239	100	(1)
3240	76	(1)
3241	57	(1)
3242	70	(1)
3243	90	(9)
3244	82	(1)
3245	60	(9)

Stock No.	DBH	Code No.
3246	77	(1)
3247	70	(11)
3248	70	(9)
3249	72	(9)
3250	56	(9)
3251	69	(9)
3252	54	(9)
3253	81	(13)
3254	70	(1)
3255	79	(9)
3256	82	(24)
3257	85	(1)
3258	78	(1)
3259	65	(9)
3260	80	(9)
3261	75	(5)
3262	50	(35)
3263	65	(9)
3264	100	(11)
3265	65	(43)
3266	58	(1)
3267	54	(9)
3268	70	(2)
3269	90	(2)
3270	70	(3)
3271	52	(1)
3272	56	(1)
3273	70	(32)
3274	73	(1)
3275	70	(9)
3276	82	(43)
3277	78	(22)
3278	87	(1)
3279	55	(15)
3280	100	(2)
3281	70	(11)
3282	75	(9)
3283	80	(1)
3284	100	(2)
3285	79	(9)
3286	85	(9)
3287	54	(9)
3288	120	(2)
3289	100	(22)
3290	70	(9)
3291	56	(9)
3292	64	(9)
3293	54	(11)
3294	74	(1)
3295	74	(1)
3296	68	(9)

Stock No.	DBH	Code No.
3297	100	(1)
3298	88	(1)
3299	90	(9)
3300	62	(9)
3401	89	(1)
3402	80	(9)
3403	79	(20)
3404	54	(9)
3405	79	(9)
3406	60	(9)
3407	70	(1)
3408	80	(2)
3409	85	(2)
3410	60	(1)
3411	85	(1)
3412	68	(1)
3413	54	(9)
3414	67	(17)
3415	80	(1)
3416	57	(46)
3417	76	(1)
3418	85	(1)
3419	74	(1)
3420	60	(1)
3421	65	(10)
3422	58	(9)
3423	72	(1)
3424	54	(1)
3425	62	(1)
3426	90	(4)
3427	70	(9)
3428	87	(10)
3429	55	(9)
3430	52	(9)
3431	60	(9)
3432	62	(9)
3433	50	(35)
3434	59	(1)
3435	75	(9)
3436	63	(15)
3437	58	(9)
3438	69	(44)
3439	58	(9)
3440	74	(9)
3441	120	(4)
3442	58	(35)
3443	65	(9)
3443	69	(1)
3444	100	(1)
3445	110	(32)
3446	50	(33)

Stock No.	DBH	Code No.
3447	52	(35)
3448	70	(1)
3449	57	(9)
3450	68	(1)
3451	65	(22)
3452	50	(14)
3453	50	(9)
3454	60	(9)
3455	69	(20)
3456	76	(9)
3457	76	(9)
3458	52	(22)
3459	80	(1)
3460	54	(20)
3461	58	(9)
3462	77	(1)
3463	52	(22)
3464	55	(17)
3465	55	(1)
3466	68	(1)
3467	65	(9)
3468	50	(22)
3469	82	(1)
3470	75	(9)
3471	58	(33)
3472	70	(9)
3473	70	(1)
3474	50	(22)
3475	82	(2)
3476	80	(17)
3477	58	(46)
3478	85	(1)
3801	84	(9)
3802	59	(9)
3803	100	(9)
3804	70	(1)
3805	60	(43)
3806	50	(9)
3807	67	(9)
3808	64	(1)
3809	58	(9)
3810	54	(11)
3811	65	(9)
3812	66	(9)
3813	54	(1)
3814	72	(33)
3815	76	(9)
3816	65	(9)
3817	60	(9)
3818	55	(20)
3819	60	(9)
3820	50	(9)
3821	53	(9)
3822	61	(9)
3823	60	(1)
3824	72	(9)
3825	50	(4)
3826	54	(1)
3827	90	(9)
3828	59	(9)
3829	72	(9)
3830	63	(9)
3831	75	(9)
3832	52	(22)
3833	66	(9)
3834	53	(7)
3835	57	(9)
3836	120	(9)
3837	60	(9)
3838	65	(7)
3839	56	(17)
3840	65	(9)
3841	57	(1)
3842	63	(1)
3843	63	(1)
3844	71	(11)
3845	65	(9)
3846	50	(46)
3847	50	(7)
3848	50	(46)
3849	50	(9)
3850	52	(4)
3851	72	(9)
5085	78	(1)
5086	65	(37)
5087	70	(1)
5088	89	(1)
5089	68	(43)
5090	50	(14)
5091	60	(20)
5092	60	(3)
5093	50	(43)

STOCK MAPPING - MABIRA FOREST RESERVE
COMPARTMENT 177
BLOCK METHOD
SUMMARY BY DIAMETER CLASSES
BLOCK 1 (0.7 ha)

GENERA	DIAMETER CLASSES						TOTAL (All classes) M³
	50-70 cm M³	71-90 cm M³	91-110 cm M³	111-130 cm M³	131-150 cm M³	151-170 cm M³	
Fee group I							
Milicia	-	-	-	-	-	-	-
Entandrophragma	-	-	-	-	-	-	-
Fagara	1	-	-	-	-	-	1
Lovoa	-	-	-	-	-	-	-
Holoptelea	-	-	-	-	-	-	-
Olea	-	-	-	-	-	-	-
Sub total fee group I	1	-	-	-	-	-	1
Fee group II							
Albizzia	5	-	-	-	-	-	5
Fagaropsis	-	-	-	-	-	-	-
Maesopsis	-	-	-	-	-	-	-
Markhamia	1	-	-	-	-	-	1
Prunus	-	1	-	-	-	-	1
Alstonia	-	-	-	-	-	-	-
Aningeria	1	-	-	-	-	-	1
Antiaris	3	1	-	-	-	-	4
Balanites	-	-	-	-	-	-	-
Canarium	-	-	-	-	-	-	-
Celtis	8	2	-	-	-	-	10
Chrysophyllum	-	-	-	-	-	-	-
Cordia	-	-	-	-	-	-	-
Diospyros	1	-	-	-	-	-	1
Dombeya	-	-	-	-	-	-	-
Erythrina	-	-	-	-	-	-	-
Funtumia	-	-	-	-	-	-	-
Erythrophleum	-	-	-	-	-	-	-

Fee group II cont'd

Mildbradiodendron	-	-	-	-	-	-	-
Morus	-	-	-	-	-	-	-
Polyscias	-	-	-	-	-	-	-
Pseodospondias	-	-	-	-	-	-	-
Phyllanthus	-	-	-	-	-	-	-
Schrebera	-	-	-	-	-	-	-
Warburgia	-	-	-	-	-	-	-
Sub total fee group II	19	4	-	-	-	-	23
Fee group III							
Blighia	-	-	-	-	-	-	-
Bosquea	8	-	-	-	-	-	8
Cola	-	-	-	-	-	-	-
Croton	-	1	-	-	-	-	1
Ficus	-	1	-	-	-	-	1
Irvingia	-	-	-	-	-	-	-
Lannea	-	-	-	-	-	-	-
Mimusops	-	-	-	-	-	-	-
Phyllanthus	-	-	-	-	-	-	-
Ricinodendron	-	-	-	-	-	-	-
Sapium	-	-	-	-	-	-	1
Trichilia	1	-	-	-	-	-	1
Zanha	1	-	-	-	-	-	-
Lasiodiscus	-	-	-	-	-	-	-
Unknown	-	-	-	-	-	-	-
Sub total fee group III	10	2	-	-	-	-	12
GRAND TOTAL	30	6	-	-	-	-	36

STOCK MAPPING - MABIRA FOREST RESERVE
COMPARTMENT 177
BLOCK METHOD
SUMMARY BY DIAMETER CLASSES
BLOCK 2 (4 ha)

GENERA	DIAMETER CLASSES						TOTAL (All classes) No.
	50-70 cm No.	71-90 cm No.	91-110 cm No.	111-130 cm No.	131-150 cm No.	151-170 cm No.	
Fee group I							
Milicia	1	–	–	–	–	–	1
Entandrophragma	–	–	–	–	–	–	–
Fagara	2	2	–	–	–	–	4
Lovoa	–	–	–	–	–	–	–
Holoptelea	8	2	–	–	–	–	10
Olea	–	–	–	–	–	–	–
Sub total fee group I	11	4	–	–	–	–	15
Fee group II							
Albizzia	2	1	–	–	–	–	3
Fagaropsis	–	–	–	–	–	–	–
Maesopsis	–	–	–	–	–	–	–
Markhamia	1	2	–	–	–	–	3
Prunus	–	–	–	–	–	–	–
Alstonia	–	–	–	–	–	–	–
Aningeria	–	–	–	–	–	–	–
Antiaris	1	1	–	–	–	–	2
Balanites	–	1	–	–	–	–	1
Canarium	–	–	–	–	–	–	–
Celtis	66	3	–	–	–	–	69
Chrysophyllum	7	–	–	–	–	–	7
Cordia	–	–	–	–	–	–	–
Diospyros	3	–	–	–	–	–	3
Dombeya	–	–	–	–	–	–	–
Erythrina	–	–	–	–	–	–	–
Funtumia	–	–	–	–	–	–	–
Erythrophleum	–	–	–	–	–	–	–

Fee group II cont'd

Mildbradiodendron	2	–	–	–	–	–	2
Morus	–	–	–	–	–	–	–
Polyscias	–	–	–	–	–	–	–
Pseodospondias	–	–	–	–	–	–	–
Phyllanthus	–	–	–	–	–	–	–
Schrebera	–	–	–	–	–	–	–
Warburgia	1	–	–	–	–	–	1
Sub total fee group II	83	8	–	–	–	–	91
Fee group III							
Blighia	–	–	–	–	–	–	–
Bosquea	10	3	–	–	–	–	13
Cola	–	–	–	–	–	–	–
Croton	1	–	–	–	–	–	1
Ficus	–	1	–	–	–	–	1
Irvingia	–	–	–	–	–	–	–
Lannea	–	–	–	–	–	–	–
Mimusops	–	–	–	–	–	–	–
Phyllanthus	2	1	–	–	–	–	–
Ricinodendron	–	–	–	–	–	–	–
Sapium	–	–	–	–	–	–	–
Trichilia	1	–	–	–	–	–	1
Zanha	2	–	–	–	–	–	2
Lasiodiscus	–	–	–	–	–	–	–
Unknown	–	–	–	–	–	–	–
Sub total fee group III	16	5	–	–	–	–	21
GRAND TOTAL	110	17	–	–	–	–	127

STOCK MAPPING - MABIRA FOREST RESERVE
COMPARTMENT 177
BLOCK METHOD
SUMMARY BY VOLUME
BLOCK 1 (0.7 ha)

GENERA	DIAMETER CLASSES						TOTAL (All classes)	
	50–70 cm M³	71–90 cm M³	91–110 cm M³	111–130 cm M³	131–150 cm M³	151–170 cm M³	M³	M³/ha
Fee group I								
Milicia	–	–	–	–	–	–	–	–
Entandrophragma	–	–	–	–	–	–	–	–
Fagara	1.33	–	–	–	–	–	1.33	1.90
Lovoa	–	–	–	–	–	–	–	–
Holoptelea	–	–	–	–	–	–	–	–
Olea	–	–	–	–	–	–	–	–
Sub total fee group I	1.33	–	–	–	–	–	1.33	1.90
Fee group II								
Albizzia	11.03	–	–	–	–	–	11.03	15.76
Fagaropsis	–	–	–	–	–	–	–	–
Maesopsis	–	–	–	–	–	–	–	–
Markhamia	1.65	–	–	–	–	–	1.65	–
Prunus	–	3.27	–	–	–	–	3.27	–
Alstonia	–	–	–	–	–	–	–	–
Aningeria	1.99	–	–	–	–	–	1.99	2.84
Antiaris	7.25	4.17	–	–	–	–	11.42	16.31
Balanites	–	–	–	–	–	–	–	–
Canarium	–	–	–	–	–	–	–	–
Celtis	18.26	11.00	–	–	–	–	29.26	41.80
Chrysophyllum	–	–	–	–	–	–	–	–
Cordia	–	–	–	–	–	–	–	–
Diospyros	2.40	–	–	–	–	–	2.40	3.43
Dombeya	–	–	–	–	–	–	–	–
Erythrina	–	–	–	–	–	–	–	–
Funtumia	–	–	–	–	–	–	–	–
Erythrophleum	–	–	–	–	–	–	–	–

ANNEX 6

Fee group II cont'd								
Mildbradiodendron	-	-	-	-	-	-	-	-
Morus	-	-	-	-	-	-	-	-
Polyscias	-	-	-	-	-	-	-	-
Pseodospondias	-	-	-	-	-	-	-	-
Phyllanthus	-	-	-	-	-	-	-	-
Schrebera	-	-	-	-	-	-	-	-
Warburgia	-	-	-	-	-	-	-	-
Sub total fee group II	42.58	18.44	-	-	-	-	61.02	87.17
Fee group III								
Blighia	-	-	-	-	-	-	-	-
Bosquea	14.60	-	-	-	-	-	14.60	20.86
Cola	-	-	-	-	-	-	-	-
Croton	-	1.85	-	-	-	-	1.85	2.64
Ficus	-	2.41	-	-	-	-	2.41	3.44
Irvingia	-	-	-	-	-	-	-	-
Lannea	-	-	-	-	-	-	-	-
Mimusops	-	-	-	-	-	-	-	-
Phyllanthus	-	-	-	-	-	-	-	-
Ricinodendron	-	-	-	-	-	-	-	-
Sapium	-	-	-	-	-	-	-	-
Trichilia	-	1.52	-	-	-	-	1.52	2.17
Zanha	-	1.48	-	-	-	-	1.48	2.11
Lasiodiscus	-	-	-	-	-	-	-	-
Unknown	-	-	-	-	-	-	-	-
Sub total fee group III	14.60	7.26	-	-	-	-	21.86	31.23
GRAND TOTAL	58.51	25.70	-	-	-	-	84.21	120.30

STOCK MAPPING - MABIRA FOREST RESERVE
COMPARTMENT 177
BLOCK METHOD
SUMMARY BY VOLUME
BLOCK 2 (4 ha)

GENERA	DIAMETER CLASSES						TOTAL (All classes)	
	50-70 cm M³	71-90 cm M³	91-110 cm M³	111-130 cm M³	131-150 cm M³	151-170 cm M³	M³	M³/ha
Fee group I								
Milicia	2.49	-	-	-	-	-	2.49	0.62
Entandrophragma	-	-	-	-	-	-	-	-
Fagara	2.88	4.72	-	-	-	-	7.60	1.90
Lovoa	-	-	-	-	-	-	-	-
Holoptelea	22.48	9.83	-	-	-	-	32.31	8.08
Olea	-	-	-	-	-	-	-	-
Sub total fee group I	27.85	14.55	-	-	-	-	42.40	10.60
Fee group II								
Albizzia	3.54	4.11	-	-	-	-	7.65	1.91
Fagaropsis	-	-	-	-	-	-	-	-
Maesopsis	-	-	-	-	-	-	-	-
Markhamia	1.31	6.48	-	-	-	-	7.79	1.95
Prunus	-	-	-	-	-	-	-	-
Alstonia	-	-	-	-	-	-	-	-
Aningeria	-	-	-	-	-	-	-	-
Antiaris	2.06	6.17	-	-	-	-	8.23	2.06
Balanites	-	3.20	-	-	-	-	3.20	0.80
Canarium	-	-	-	-	-	-	-	-
Celtis	177.28	15.99	-	-	-	-	193.27	48.32
Chrysophyllum	17.91	-	-	-	-	-	17.91	4.48
Cordia	-	-	-	-	-	-	-	-
Diospyros	5.02	-	-	-	-	-	5.02	1.26
Dombeya	-	-	-	-	-	-	-	-
Erythrina	-	-	-	-	-	-	-	-
Funtumia	-	-	-	-	-	-	-	-
Erythrophleum	-	-	-	-	-	-	-	-

Fee group II cont'd

Mildbradiodendron	-	-	-	-	-	-	-	-
Morus	2.36	-	-	-	-	-	2.36	0.59
Polyscias	-	-	-	-	-	-	-	-
Pseodospondias	-	-	-	-	-	-	-	-
Phyllanthus	-	-	-	-	-	-	-	-
Schrebera	-	-	-	-	-	-	-	-
Warburgia	1.89	-	-	-	-	-	1.89	0.47
Sub total fee group II	211.37	35.95	-	-	-	-	247.32	61.83
Fee group III								
Blighia	-	-	-	-	-	-	-	-
Bosquea	21.73	10.96	-	-	-	-	32.69	8.17
Cola	-	-	-	-	-	-	-	-
Croton	1.22	-	-	-	-	-	1.22	0.31
Ficus	-	3.88	-	-	-	-	3.88	0.97
Irvingia	-	-	-	-	-	-	-	-
Lannea	-	-	-	-	-	-	-	-
Mimusops	-	-	-	-	-	-	-	-
Phyllanthus	1.72	2.11	-	-	-	-		
Ricinodendron	-	-	-	-	-	-	-	-
Sapium	-	-	-	-	-	-	-	-
Trichilia	1.37	-	-	-	-	-	1.37	0.34
Zanha	2.96	-	-	-	-	-	2.96	0.74
Lasiodiscus	-	-	-	-	-	-	-	-
Unknown	-	-	-	-	-	-	-	-
Sub total fee group III	29.00	16.95	-	-	-	-	45.95	11.49
GRAND TOTAL	268.22	67.45	-	-	-	-	335.67	83.92

Trees Enumerated Under Block Method

BLOCK 1

Tree No.	DBH	Code No.
5689	90	(09)
5690	55	(09)
5691	55	(09)
5692	54	(03)
5693	54	(07)
5694	74	(14)
5695	60	(09)
5696	50	(07)
5697	80	(09)
5698	67	(15)
5699	55	(09)
5700	51	(07)
5701	59	(07)
5702	60	(01)
5703	61	(43)
5704	54	(04)
5705	54	(07)
5706	65	(01)
5707	50	(09)
5708	54	(09)
5709	71	(22)
5710	51	(07)
5711	60	(20)
5712	57	(07)
5713	62	(46)
5714	56	(01
5715	62	(09)
5716	62	(01
5717	74	(04)
5718	50	(07)
5719	57	(09)
5720	63	(01)
5721	50	(09)
5722	87	(37)
5723	55	(09)
5724	56	(32)

BLOCK 2

Annex 7

Stock No.	DBH	Code No.	Stock No.	DBH	Code No.	Stock No.	DBH	Code No.
4256	54	(46)	4300	50	(07)	4344	63	(20)
4257	62	(07)	4301	60	(09)	4345	63	(10)
4258	56	(33)	4302	58	(43)	4346	54	(07)
4259	80	(09)	4303	65	(09)	4347	62	(09)
4260	52	(35)	4304	56	(09)	4348	56	(09)
4261	50	(09)	4305	90	(45)	4349	68	(29)
4262	67	(24)	4306	50	(11)	4350	60	(09)
4263	69	(09)	4307	50	(24)	4351	60	(09)
4264	60	(09)	4308	78	(05)	4352	61	(09)
4265	70	(09)	4309	55	(24)	4353	67	(11)
4266	59	(09)	4310	55	(09)	4354	65	(07)
4267	55	(09)	4311	64	(07)	4355	74	(07)
4268	70	(09)	4312	90	(04)	4356	80	(35)
4269	54	(09)	4313	60	(09)	4357	64	(24)
4270	70	(11)	4314	70	(07)	4358	70	(09)
4271	60	(09)	4315	70	(46)	4359	69	(11)
4272	55	(09)	4316	70	(09)	4360	55	(09)
4273	70	(09)	4317	83	(09)	4361	60	(09)
4274	80	(24)	4318	52	(04)	4362	68	(11)
4275	59	(09)	4319	60	(14)	4363	60	(09)
4276	50	(09)	4320	88	(09)	4364	66	(09)
4277	54	(01)	4321	60	(09)	4365	53	(07)
4278	83	(01)	4322	56	(33)	4366	55	(09)
4279	74	(30)	4323	60	(11)	4367	72	(20)
4280	50	(30)	4324	54	(07)	4368	60	(09)
4281	50	(35)	4325	56	(09)	4369	67	(09)
4282	60	(09)	4326	60	(09)	4370	54	(07)
4283	70	(24)	4327	50	(09)	4371	62	(09)
4284	51	(09)	4328	70	(09)	4372	57	(09)
4285	75	(07)	4329	53	(09)	4373	53	(09)
4286	63	(09)	4330	60	(09)	4374	58	(09)
4287	59	(09)	4331	55	(09)	4375	63	(09)
4288	51	(15)	4332	57	(09)	4376	51	(09)
4289	50	(09)	4333	50	(09)	4377	50	(09)
4290	60	(09)	4334	69	(09)	4378	77	(07)
4291	70	(09)	4335	50	(09)	4379	65	(15)
4292	70	(09)	4336	88	(20)	4380	62	(09)
4293	64	(09)	4337	57	(09)	4381	70	(24)
4294	65	(09)	4338	83	(30)	4382	53	(53)
4295	85	(24)	4339	59	(09)			
4296	55	(01)	4340	55	(24)			
4297	64	(09)	4341	62	(20)			
4298	50	(09)	4342	60	(11)			
4299	55	(07)	4343	52	(15)			

Annex 8

Species Code Numbers used in Mabira Forest Reserve

Generic Name	Code No.
Albizia	(01)
Alstonia	(02)
Aningeria	(03)
Antiaris	(04)
Balanites	(05)
Blighia	(06)
Bosquiea	(07)
Canarium	(08)
Celtis	(09)
Militia (formerly Chlorophora)	(10)
Chrysophyllum	(11)
Cola	(12)
Cordia	(13)
Diospyros	(14)
Dombeya	(16)
Entandrophragma	(17)
Erythrophlum	(18)
Erythrina	(19)
Fagara	(20)
Fagaropsis	(21)
Ficus	(22)
Funtumia	(23)
Holoptelea	(24)
Irvingia	(25)
Lannea	(26)
Lasiodiscus	(27)
Lovoa	(28)
Measopsis	(29)
Markamia	(30)
Mildbraediodendron	(31)
Mimusops	(32)
Morus	(33)
Olea	(34)
Phyllanthus	(35)
Ploycias	(36)
Prunus	(37)
Pseuadospondias	(38)
Pycnanthus	(39)
Ricinodendron	(40)
Sapium	(41)
Scherebra	(42)
Trichilia	(43)
Unknown	(44)
Warburgia	(45)
Zhana	(46)

Annex 9

NOTES ON STOCKMAPPING

Stockmapping is normally done in a forest due for harvesting two or three years before felling takes place. It is intended to:

- provide an estimate of exploitable round wood available in the forest.
- determine the best alignment of extraction roads.
- check on the completeness of felling of the trees.

Two methods are in practice:

Budongo method
Block method

For each of the methods, three steps are involved:

i) Preliminary office work.

ii) Field work

iii) Analysis of the results and stockmap production.

BUDONGO METHOD

Preliminary office work

This involves dividing the area to be stock mapped into blocks using a forest reserve map.

A baseline is drawn preferably running north-south. However, the baseline should run through the longest axis of the area to be stockmapped.

Using a setsquare and protractor, the bearing of the baseline is determined from a point which is easily recognised on the ground. The bearing so determined is adjusted for magnetic variation.

Strip line are drawn at right angle to the baseline and at intervals of 200 metres. Block lines are drawn at 200 metres intervals along strip lines dividing the strip lines into 200m square blocks. Blocks are numbered serially and any area of forest not measuring up to a full block is treated as a block and given a number. Guidelines are drawn in each block at 50 metre intervals along the strip lines. Strip, block and guidelines are numbered serially. Abbreviations of Ba for baseline, Bl. for blockline, G. for guideline and S. for strip line are used.

Annex 9

Fieldwork

In the field and using the map produced during the preliminary office work, base strip, block and guidelines are cut as indicated on the map. Strip lines have pegs placed at 50m intervals giving rise to three guidelines in each block. Guidelines are cut at right angle to the strip lines using either an optical square or a prismatic compass. To enable trees to be located accurately, pegs are placed at 20m intervals along the base, block and guidelines. The pegs are numbered serially. (Appendix V1.17.1)

Before enumeration commences, species are allocated codes. Enumeration is done by a group consisting of one technical staff, one Forest Guard and four forest workers. The technical staff does the booking and walks midway between two guide lines, taking a sweep 50m wide. The Forest Guard walks along the reference guideline. The four forest workers walk level with both the technical staff and the Forest Guard at fixed distances of 8⅓m from each other. On spotting a tree to be measured, two men nearest to the tree go to measure it while the other two remain stationary. Meanwhile the technical staff estimates the distance of the tree from the reference guideline at right angle to it while the Forest Guard estimates the distance along the guideline from the zero point assisted by the pegs placed at 20m intervals. The tree is measured for diameter at breast height (1.3m) from the highest point. It is then physically numbered by inserting the figures into the wood after removing a square patch of bark. The number should be inserted above breast height and at the stump. Booking is done by entering the code number, dbh and number of the tree in the centre column of the field book. Distances along and from the guideline to the tree are entered outside the centre column. Other features like rivers, slopes, sites of forest destruction etc are also recorded. The field book should show from which side of the reference guideline the measurements are made.

At the end of each block, a horizontal line is drawn across the page and the numbers of the next strip line, block and guideline recorded along the horizontal line. (Appendix V1.17.3)

Analysis of the results and Stockmap Production

A summary of the stockmapping results is made by species, number of stems, diameter classes and fee groups. Trees are plotted from the figures in the field book following reference guide lines. The choice of the scale to be used depends on the stocking of the forest. Only the codes and stock numbers are shown on the stockmap.

Stock No.	DBH	Code No.
500	52	(7)
501	62	(7)
502	60	(9)
503	70	(20)
504	65	(5)
505	62	(9)
506	83	(24)
507	102	(9)
508	66	(1)
509	60	(9)
510	102	(24)
511	70	(24)
512	110	(4)
513	70	(7)
514	50	(9)
515	50	(5)
516	78	(37)
517	60	(1)
518	50	(7)
519	52	(37)
520	67	(9)
521	97	(24)
522	50	(7)
523	58	(9)
524	100	(24)
525	52	(9)
526	50	(7)
527	72	(9)
528	52	(9)
529	81	(1)
530	56	(1)
531	64	(20)
532	80	(7)
533	56	(9)
534	81	(7)
535	80	(1)
536	52	(11)
537	70	(4)
538	86	(9)
539	55	(4)
540	55	(30)
541	72	(33)
542	73	(9)
543	65	(9)
544	50	(9)
545	54	(9)
546	55	(7)
547	55	(9)
548	59	(1)
549	80	(24)
550	59	(24)

Stock No.	DBH	Code No.
551	110	(24)
552	75	(22)
553	56	(9)
554	70	(1)
555	60	(9)
556	76	(9)
557	55	(2)
558	55	(1)
559	70	(9)
560	55	(7)
561	75	(1)
562	50	(7)
563	60	(9)
564	73	(9)
565	50	(23)
566	50	(9)
567	66	(9)
568	55	(1)
569	56	(7)
570	65	(9)
571	60	(11)
572	52	(9)
573	53	(35)
574	73	(46)
575	50	(7)
576	70	(11)
577	60	(22)
578	58	(1)
579	75	(22)
580	80	(11)
581	51	(14)
582	60	(9)
583	80	(5)
584	59	(37)
585	57	(22)
586	60	(37)
587	50	(13)
588	86	(41)
589	100	(41)
590	92	(1)
591	70	(3)
592	50	(4)
593	69	(9)
594	60	(35)
595	90	(22)
596	80	(24)
597	69	(1)
598	50	(26)
599	65	(9)
600	60	(1)
601	53	(7)

Stock No.	DBH	Code No.
602	55	(9)
603	70	(9)
604	50	(1)
605	63	(37)
606	68	(37)
607	50	(37)
608	57	(1)
609	62	(1)
610	105	(22)
611	90	(7)
612	60	(9)
613	59	(1)
614	76	(33)
615	64	(13)
616	61	(7)
617	56	(9)
618	62	(9)
619	99	(9)
620	62	(9)
621	110	(13)
622	76	(9)
623	69	(11)
624	75	(22)
625	67	(9)
626	60	(9)
627	53	(1)
628	63	(32)
629	82	(20)
630	90	(24)
631	58	(7)
632	54	(7)
633	50	(9)
634	61	(15)
635	67	(9)
636	100	(13)
637	52	(9)
638	77	(11)
639	66	(9)
640	87	(9)
641	100	(9)
642	62	(1)
642	100	(24)
643	63	(32)
644	57	(7)
645	62	(7)
646	65	(9)
647	52	(9)
648	68	(4)
649	59	(1)
650	57	(7)
651	66	(26)

Stock No.	DBH	Code No.
652	80	(22)
653	74	(7)
654	53	(9)
655	55	(33)
656	65	(11)
657	62	(9)
658	69	(4)
659	70	(9)
660	77	(9)
661	83	(1)
662	54	(30)
663	99	(7)
664	83	(11)
665	80	(9)
666	62	(9)
667	67	(35)
668	56	(1)
669	63	(9)
670	95	(9)
671	52	(1)
672	63	(9)
673	54	(43)
674	84	(1)
675	52	(22)
676	72	(9)
677	50	(9)
678	54	(9)
679	54	(9)
680	50	(9)
681	55	(9)
682	56	(9)
683	56	(1)
684	74	(1)
685	69	(11)
686	53	(9)
687	63	(9)
688	150	(22)
689	75	(22)
690	89	(22)
691	69	(1)
692	85	(46)
693	59	(22)
694	52	(36)
695	69	(31)
696	99	(1)
697	52	(9)
698	74	(9)
699	67	(35)
700	59	(9)
701	95	(9)
702	64	(9)

Stock No.	DBH	Code No.
703	78	(1)
704	76	(9)
705	72	(1)
706	80	(46)
707	52	(1)
708	79	(7)
709	61	(1)
710	62	(9)
711	77	(9)
712	65	(11)
713	59	(46)
714	99	(5)
715	73	(11)
716	59	(11)
717	55	(1)
718	51	(33)
719	90	(9)
720	100	(1)
721	52	(9)
722	65	(7)
723	100	(9)
724	80	(1)
725	53	(9)
726	89	(9)
727	64	(9)
728	89	(9)
729	63	(9)
730	50	(9)
731	100	(9)
732	60	(9)
733	61	(9)
734	67	(2)
735	63	(9)
736	70	(30)
737	50	(11)
738	80	(9)
739	54	(7)
740	55	(15)
741	60	(30)
742	65	(15)
743	50	(7)
744	50	(9)
745	56	(24)
746	75	(9)
747	60	(11)
748	71	(7)
749	77	(1)
750	52	(34)
751	64	(7)
752	82	(11)
753	68	(9)

Stock No.	DBH	Code No.
754	65	(1)
755	90	(4)
756	56	(9)
757	90	(11)
758	54	(9)
759	90	(9)
760	52	(15)
761	80	(7)
762	61	(9)
763	52	(9)
764	62	(9)
765	100	(24)
766	64	(9)
767	68	(8)
768	68	(1)
769	56	(9)
770	60	(9)
771	65	(9)
772	56	(15)
773	70	(9)
774	70	(7)
775	54	(37)
776	52	(11)
777	53	(37)
778	68	(37)
779	130	(34)
780	61	(9)
781	58	(33)
782	53	(33)
783	56	(7)
784	67	(33)
785	52	(9)
786	50	(33)
787	63	(4)
788	55	(7)
789	64	(9)
790	80	(9)
791	60	(1)
792	75	(33)
793	69	(9)
794	55	(7)
795	68	(1)
796	50	(7)
797	74	(33)
798	76	(9)
799	120	(1)
800	50	(9)
801	53	(9)
802	100	(4)
803	90	(37)
804	70	(37)

Stock No.	DBH	Code No.
805	90	(9)
806	74	(30)
807	60	(4)
808	70	(35)
809	70	(3)
810	59	(45)
811	104	(24)
812	80	(32)
813	50	(9)
814	106	(3)
815	55	(9)
816	150	(26)
817	60	(7)
818	130	(37)
819	87	(35)
820	65	(7)
821	76	(33)
822	73	(9)
823	54	(7)
824	78	(4)
825	84	(1)
826	74	(1)
827	83	(9)
828	50	(9)
829	78	(33)
830	50	(35)
831	55	(7)
832	50	(22)
833	53	(33)
834	59	(24)
835	63	(1)
836	80	(9)
837	75	(35)
838	57	(7)
839	70	(5)
840	51	(4)
841	56	(1)
842	57	(9)
843	56	(1)
844	70	(9)
845	80	(22)
846	100	(24)
847	80	(9)
848	60	(9)
849	70	(9)
850	62	(7)
851	76	(33)
852	71	(30)
853	70	(9)
854	150	(22)
855	63	(9)
856	90	(11)
857	60	(9)
858	56	(1)
859	80	(24)
860	50	(7)
861	99	(1)
862	61	(15)
863	60	(1)
864	60	(9)
865	64	(35)
866	50	(7)
867	53	(30)
868	80	(7)
869	60	(9)
870	56	(9)
871	90	(10)
872	53	(9)
873	87	(1)
874	60	(20)
875	103	(46)
876	90	(9)
877	80	(4)
878	90	(22)
879	60	(9)
880	50	(35)
881	50	(9)
882	100	(1)
883	90	(11)
884	55	(14)
885	150	(22)
886	130	(24)
887	60	(4)
888	60	(9)
889	100	(35)
890	66	(15)
891	60	(37)
892	52	(7)
893	77	(7)
894	60	(7)
895	50	(23)
896	57	(9)
897	51	(6)
898	50	(7)
899	57	(30)
900	80	(22)
901	80	(22)
902	54	(9)
903	60	(7)
904	70	(9)
905	66	(1)
906	52	(35)

Stock No.	DBH	Code No.
907	60	(11)
908	63	(1)
909	60	(11)
910	70	(46)
911	60	(9)
912	55	(9)
913	61	(9)
914	60	(11)
915	60	(45)
916	52	(9)
917	55	(9)
918	80	(9)
919	67	(9)
920	60	(9)
921	90	(24)
922	63	(9)
923	80	(30)
924	84	(4)
925	60	(7)
926	72	(9)
927	56	(7)
928	60	(9)
929	66	(43)
930	69	(7)
931	80	(9)
932	71	(35)
933	64	(24)
934	55	(9)
935	70	(11)
936	52	(9)
937	55	(9)
938	53	(11)
939	55	(7)
940	69	(30)
941	60	(7)
942	60	(9)
943	64	(1)
944	54	(9)
945	62	(9)
946	50	(9)
947	60	(9)
948	60	(30)
949	90	(24)
950	58	(45)
951	56	(7)
952	50	(1)
953	50	(35)
954	98	(4)
955	50	(33)
956	62	(4)
957	80	(30)

Stock No.	DBH	Code No.
958	50	(9)
959	53	(22)
960	70	(37)
961	82	(7)
962	65	(9)
963	50	(30)
964	52	(9)
965	62	(10)
966	52	(30)
967	55	(9)
968	54	(9)
969	72	(37)
970	53	(9)
971	67	(37)
972	60	(9)
973	52	(9)
974	50	(1)
975	60	(37)
976	80	(37)
977	80	(10)
978	67	(37)
979	50	(9)
980	50	(1)
981	52	(1)
982	50	(4)
983	62	(20)
984	59	(1)
985	85	(37)
986	70	(1)
987	60	(37)
988	74	(9)
989	70	(1)
990	62	(9)
991	52	(30)
992	50	(7)
993	65	(9)
994	50	(9)
995	94	(22)
996	64	(35)
997	60	(27)
998	54	(27)
999	54	(7)
1000	60	(7)
1001	63	(46)
1002	73	(37)
1003	60	(37)
1004	67	(20)
1005	56	(20)
1006	58	(8)
1007	90	(3)
1008	73	(9)

Stock No.	DBH	Code No.
1009	56	(33)
1010	58	(9)
1011	68	(32)
1012	52	(8)
1013	50	(2)
1014	60	(11)
1015	65	(33)
1016	75	(6)
1017	52	(4)
1018	100	(3)
1019	50	(9)
1020	60	(20)
1021	100	(3)
1022	50	(9)
1023	53	(9)
1024	50	(6)
1025	60	(35)
1026	58	(7)
1027	58	(4)
1028	70	(3)
1029	50	(9)
1030	50	(9)
1031	60	(9)
1032	52	(7)
1033	70	(2)
1034	50	(19)
1035	57	(33)
1036	70	(2)
1037	55	(9)
1038	70	(33)
1039	50	(9)
1040	54	(7)
1041	60	(9)
1042	55	(7)
1043	56	(7)
1044	50	(9)
1045	50	(33)
1046	59	(7)
1047	50	(20)
1048	56	(7)
1049	55	(26)
1050	70	(7)
1051	90	(4)
1052	70	(4)
1053	50	(9)
1054	60	(30)
1055	50	(2)
1056	50	(9)
1057	60	(14)
1058	50	(20)
1059	50	(2)
1060	53	(10)
1061	55	(7)
1062	50	(7)
1063	70	(10)
1064	65	(9)
1065	72	(4)
1066	50	(9)
1067	65	(1)
1068	73	(9)
1069	57	(46)
1070	85	(46)
1071	55	(20)
1072	50	(9)
1073	72	(35)
1074	55	(26)
1075	50	(44)
1076	60	(6)
1077	55	(35)
1078	53	(1)
1079	60	(9)
1080	60	(35)
1081	50	(4)
1082	50	(9)
1083	55	(9)
1084	74	(22)
1085	57	(32)
1086	50	(7)
1087	55	(7)
1088	70	(3)
1089	80	(22)
1090	65	(9)
1091	76	(12)
1092	62	(46)
1093	55	(33)
1094	60	(1)
1095	68	(33)
1096	80	(19)
1097	50	(12)
1098	65	(9)
1099	56	(9)
1100	56	(37)
1101	53	(1)
1102	80	(24)
1103	56	(9)
1104	63	(11)
1105	76	(4)
1106	61	(11)
1107	55	(20)
1108	68	(7)
1109	65	(1)
1110	57	(9)

Stock No.	DBH	Code No.
1111	50	(20)
1112	50	(20)
1113	68	(9)
1114	50	(9)
1115	72	(11)
1116	68	(11)
1117	50	(11)
1118	54	(1)
1119	58	(11)
1120	70	(1)
1121	65	(7)
1122	52	(9)
1123	55	(9)
1124	50	(9)
1125	60	(7)
1126	60	(9)
1127	60	(11)
1128	50	(9)
1129	70	(4)
1130	67	(24)
1131	56	(9)
1132	50	(9)
1133	60	(11)
1134	60	(9)
1135	50	(35)
1136	70	(7)
1137	70	(46)
1138	65	(46)
1139	60	(7)
1140	50	(7)
1141	50	(27)
1142	57	(9)
1143	80	(4)
1144	50	(46)
1145	65	(24)
1146	60	(7)
1147	67	(24)
1148	55	(9)
1149	60	(35)
1150	80	(5)
1151	70	(24)
1152	53	(9)
1153	50	(46)
1154	60	(7)
1155	70	(46)
1156	60	(9)
1157	90	(2)
1158	56	(46)
1159	55	(11)
1160	50	(5)
1161	70	(30)

Stock No.	DBH	Code No.
1162	70	(5)
1163	63	(5)
1164	60	(12)
1165	60	(7)
1166	60	(7)
1167	60	(2)
1168	83	(32)
1169	50	(46)
1170	65	(5)
1171	65	(20)
1172	61	(11)
1173	68	(5)
1174	65	(4)
1175	90	(4)
1176	71	(22)
1177	60	(7)
1178	50	(4)
1179	52	(37)
1180	70	(4)
1181	65	(9)
1182	60	(7)
1183	65	(1)
1184	70	(4)
1185	70	(4)
1186	55	(3)
1187	50	(7)
1188	60	(7)
1189	50	(9)
1190	55	(7)
1191	50	(7)
1192	70	(4)
1193	60	(20)
1194	50	(20)
1195	50	(9)
1196	60	(7)
1197	57	(1)
1198	70	(11)
1199	60	(33)
1200	80	(9)
1201	83	(33)
1202	55	(9)
1203	94	(33)
1204	75	(9)
1205	83	(33)
1206	96	(7)
1207	105	(4)
1208	71	(7)
1209	69	(9)
1210	60	(7)
1211	73	(30)
1212	78	(2)

Stock No.	DBH	Code No.
1213	81	(7)
1214	63	(33)
1215	71	(37)
1216	110	(22)
1217	56	(7)
1218	68	(7)
1219	63	(7)
1220	83	(24)
1221	50	(22)
1222	58	(30)
1223	63	(9)
1224	60	(7)
1225	54	(33)
1226	54	(9)
1227	53	(4)
1228	75	(9)
1229	60	(22)
1230	75	(4)
1231	58	(4)
1232	51	(9)
1233	56	(1)
1234	50	(32)
1235	55	(4)
1236	53	(32)
1237	50	(11)
1238	56	(7)
1239	51	(33)
1240	84	(9)
1241	65	(9)
1242	50	(1)
1243	63	(9)
1244	50	(1)
1245	90	(24)
1246	58	(30)
1247	55	(9)
1248	67	(1)
1249	70	(9)
1250	70	(24)
1251	120	(1)
1252	56	(9)
1253	51	(1)
1254	64	(20)
1255	60	(9)
1256	58	(9)
1257	55	(9)
1258	120	(22)
1259	50	(9)
1260	64	(1)
1261	64	(1)
1262	64	(1)
1263	58	(33)
1264	52	(12)
1265	53	(7)
1266	56	(9)
1267	62	(9)
1268	55	(7)
1269	170	(4)
1270	79	(4)
1271	150	(22)
1272	75	(1)
1273	53	(9)
1274	60	(22)
1275	50	(9)
1276	55	(9)
1277	54	(11)
1278	55	(46)
1279	50	(46)
1280	52	(7)
1281	56	(43)
1282	69	(1)
1283	70	(9)
1284	74	(9)
1285	63	(7)
1286	80	(7)
1287	81	(7)
1288	88	(4)
1289	60	(9)
1290	50	(9)
1291	67	(24)
1292	54	(9)
1293	62	(15)
1294	79	(9)
1295	75	(15)
1296	51	(9)
1297	50	(9)
1298	52	(9)
1299	56	(9)
1300	80	(7)
1301	60	(9)
1302	58	(7)
1303	55	(9)
1304	120	(11)
1305	55	(1)
1306	100	(4)
1307	68	(11)
1308	53	(1)
1309	61	(9)
1310	75	(11)
1311	71	(1)
1312	65	(7)
1313	80	(10)
1314	53	(1)

Stock No.	DBH	Code No.	Stock No.	DBH	Code No.
1315	85	(7)	1366	58	(9)
1316	75	(2)	1367	65	(9)
1317	57	(1)	1368	61	(15)
1318	54	(43)	1369	67	(9)
1319	65	(11)	1370	61	(9)
1320	70	(7)	1371	57	(9)
1321	59	(9)	1372	87	(4)
1322	65	(11)	1373	52	(30)
1323	65	(30)	1374	65	(7)
1324	86	(4)	1375	77	(22)
1325	53	(10)	1376	78	(4)
1326	75	(22)	1377	75	(31)
1327	52	(10)	1378	50	(11)
1328	67	(9)	1379	79	(1)
1329	50	(30)	1380	52	(9)
1330	67	(9)	1381	80	(1)
1331	52	(22)	1382	77	(33)
1332	65	(22)	1383	65	(11)
1333	62	(30)	1384	64	(46)
1334	80	(24)	1385	79	(1)
1335	62	(45)	1386	63	(12)
1336	62	(1)	1387	50	(9)
1337	52	(9)	1388	70	(1)
1338	57	(30)	1389	55	(30)
1339	51	(11)	1390	100	(11)
1340	60	(11)	1391	55	(7)
1341	64	(1)	1392	50	(9)
1342	57	(11)	1393	60	(36)
1343	65	(7)	1394	55	(1)
1344	67	(9)	1395	62	(33)
1345	56	(11)	1396	71	(11)
1346	55	(7)	1397	67	(33)
1347	52	(9)	1398	64	(1)
1348	54	(11)	1399	63	(9)
1349	57	(11)	1400	56	(30)
1350	74	(7)	1401	90	(33)
1351	51	(46)	1402	51	(7)
1352	57	(7)	1403	100	(33)
1353	55	(11)	1404	75	(34)
1354	55	(11)	1405	57	(9)
1355	60	(7)	1406	54	(15)
1356	91	(1)	1407	54	(11)
1357	52	(4)	1408	54	(1)
1358	51	(9)	1409	57	(9)
1359	56	(12)	1410	74	(4)
1360	51	(30)	1411	56	(1)
1361	82	(22)	1412	54	(46)
1362	61	(9)	1413	53	(9)
1363	93	(37)	1414	56	(9)
1364	68	(13)	1415	62	(45)
1365	68	(7)	1416	54	(24)

Stock No.	DBH	Code No.
1417	50	(1)
1418	55	(9)
1419	54	(7)
1420	60	(7)
1421	67	(12)
1422	82	(1)
1423	61	(34)
1424	54	(9)
1425	56	(9)
1426	90	(4)
1427	70	(9)
1428	82	(1)
1429	84	(9)
1430	56	(41)
1431	70	(11)
1432	60	(9)
1433	66	(11)
1434	85	(11)
1435	110	(22)
1436	88	(1)
1437	57	(15)
1438	64	(1)
1439	61	(9)
1440	57	(9)
1441	52	(9)
1442	57	(31)
1443	60	(11)
1444	50	(9)
1445	79	(41)
1446	64	(31)
1447	77	(9)
1448	74	(24)
1449	66	(7)
1450	82	(9)
1451	60	(11)
1452	90	(35)
1453	56	(9)
1454	59	(15)
1455	50	(7)
1456	82	(11)
1457	80	(11)
1458	56	(11)
1459	80	(11)
1460	60	(11)
1461	64	(45)
1462	54	(1)
1463	75	(24)
1464	53	(7)
1465	66	(30)
1466	55	(34)
1467	65	(11)

Stock No.	DBH	Code No.
1468	60	(1)
1469	67	(11)
1470	53	(11)
1471	65	(24)
1472	88	(41)
1473	65	(41)
1474	62	(9)
1475	51	(7)
1476	68	(7)
1477	74	(7)
1478	65	(9)
1479	55	(9)
1480	80	(22)
1481	67	(30)
1482	63	(9)
1483	74	(9)
1483	81	(37)
1484	56	(30)
1485	51	(15)
1486	51	(15)
1487	60	(24)
1488	88	(7)
1489	77	(4)
1490	70	(12)
1491	70	(24)
1492	61	(15)
1492	66	(7)
1493	54	(1)
1494	130	(45)
1495	59	(9)
1496	63	(9)
1497	100	(24)
1498	56	(9)
1499	75	(1)
1500	77	(30)
1501	56	(22)
1502	50	(9)
1503	51	(33)
1504	67	(9)
1505	52	(9)
1506	56	(34)
1507	60	(22)
1508	90	(22)
1509	77	(1)
1510	63	(30)
1511	70	(22)
1512	99	(33)
1513	66	(1)
1514	86	(1)
1515	70	(22)
1516	80	(5)

Stock No.	DBH	Code No.	Stock No.	DBH	Code No.
1517	59	(30)	1568	100	(2)
1518	83	(1)	1569	73	(2)
1519	92	(1)	1570	60	(2)
1520	72	(3)	1571	65	(1)
1521	86	(1)	1572	67	(33)
1522	85	(1)	1573	65	(2)
1523	81	(9)	1574	100	(2)
1524	70	(1)	1575	68	(46)
1525	65	(9)	1576	56	(1)
1526	84	(1)	1577	70	(46)
1527	80	(30)	1578	110	(3)
1528	102	(1)	1579	53	(9)
1529	56	(7)	1580	110	(2)
1530	59	(43)	1581	72	(33)
1531	54	(30)	1582	52	(1)
1532	59	(22)	1583	70	(43)
1533	70	(13)	1584	81	(1)
1534	50	(34)	1585	80	(22)
1535	78	(1)	1586	99	(1)
1536	70	(22)	1587	70	(9)
1537	82	(1)	1588	73	(9)
1538	52	(9)	1589	70	(9)
1539	84	(22)	1590	80	(9)
1540	65	(22)	1591	80	(9)
1541	56	(33)	1592	56	(9)
1542	90	(43)	1593	74	(7)
1543	71	(1)	1594	82	(24)
1544	60	(1)	1595	77	(9)
1545	77	(1)	1596	88	(9)
1546	64	(33)	1597	62	(15)
1547	57	(1)	1598	51	(9)
1548	60	(46)	1599	82	(9)
1549	60	(7)	1600	55	(30)
1550	67	(34)	1601	52	(46)
1551	55	(43)	1602	66	(7)
1552	90	(3)	1603	70	(22)
1553	67	(1)	1604	58	(9)
1554	55	(7)	1605	56	(35)
1555	89	(1)	1606	50	(1)
1556	80	(22)	1607	67	(7)
1557	86	(1)	1608	80	(5)
1558	70	(1)	1609	80	(46)
1559	56	(1)	1610	65	(30)
1560	71	(9)	1611	71	(4)
1561	66	(1)	1612	67	(41)
1562	63	(1)	1613	72	(13)
1563	81	(1)	1614	50	(1)
1564	64	(1)	1615	80	(41)
1565	60	(1)	1616	60	(24)
1566	62	(30)	1617	65	(5)
1567	51	(9)	1618	70	(9)

Stock No.	DBH	Code No.
1619	50	(7)
1620	140	(3)
1621	100	(22)
1622	60	(46)
1623	50	(9)
1624	150	(22)
1625	70	(7)
1626	56	(30)
1627	50	(46)
1628	75	(11)
1629	80	(11)
1630	60	(9)
1631	50	(9)
1632	52	(9)
1633	50	(9)
1634	55	(41)
1635	60	(5)
1636	70	(7)
1637	70	(7)
1638	50	(30)
1639	50	(7)
1640	55	(7)
1641	57	(30)
1642	75	(7)
1643	50	(3)
1644	52	(7)
1645	70	(1)
1646	65	(11)
1647	50	(30)
1648	80	(46)
1649	100	(22)
1650	61	(30)
1651	70	(9)
1652	55	(9)
1653	50	(9)
1654	54	(9)
1655	55	(1)
1666	60	(9)
1667	53	(9)
1668	60	(9)
1669	65	(7)
1670	57	(9)
1671	60	(22)
1672	50	(9)
1673	62	(9)
1674	66	(1)
1675	80	(11)
1676	80	(11)
1677	65	(20)
1678	85	(7)
1679	58	(9)
1680	55	(9)
1681	50	(23)
1682	50	(1)
1683	85	(9)
1684	50	(9)
1685	60	(41)
1686	50	(9)
1687	50	(9)
1688	60	(9)
1689	50	(36)
1690	60	(30)
1691	55	(11)
1692	55	(11)
1693	60	(11)
1694	51	(11)
1695	75	(1)
1696	60	(9)
1697	80	(9)
1698	60	(1)
1699	70	(30)
1700	60	(1)
1701	78	(9)
1702	53	(9)
1703	54	(22)
1704	59	(4)
1705	50	(4)
1706	55	(22)
1707	90	(1)
1708	58	(1)
1709	60	(5)
1710	57	(10)
1711	54	(9)
1712	71	(35)
1713	65	(4)
1714	64	(9)
1715	60	(1)
1716	67	(9)
1717	60	(7)
1718	50	(7)
1719	56	(9)
1720	52	(35)
1721	67	(4)
1722	50	(9)
1723	60	(11)
1724	57	(3)
1725	50	(9)
1726	52	(11)
1727	71	(3)
1728	51	(9)
1729	54	(11)
1730	50	(7)

Stock No.	DBH	Code No.
1731	50	(9)
1732	50	(11)
1733	79	(4)
1734	50	(11)
1735	74	(9)
1736	69	(1)
1737	61	(7)
1738	69	(9)
1739	51	(9)
1740	60	(9)
1741	53	(9)
1742	63	(7)
1743	59	(11)
1744	65	(37)
1745	65	(22)
1746	73	(4)
1747	70	(22)
1748	60	(7)
1749	53	(9)
1750	60	(35)
1751	59	(1)
1752	63	(9)
1753	62	(14)
1754	56	(7)
1755	53	(9)
1756	52	(14)
1757	55	(3)
1758	52	(35)
1759	55	(9)
1760	70	(30)
1761	50	(9)
1762	70	(1)
1763	70	(22)
1764	65	(22)
1765	54	(7)
1766	60	(5)
1767	70	(9)
1768	54	(41)
1769	53	(46)
1770	53	(9)
1771	53	(12)
1772	60	(30)
1773	103	(3)
1774	55	(1)
1775	103	(22)
1776	73	(1)
1777	54	(1)
1778	75	(24)
1779	60	(15)
1780	75	(22)
1781	50	(46)
1782	70	(30)
1783	60	(13)
1784	75	(1)
1785	84	(22)
1786	70	(9)
1787	100	(3)
1788	60	(11)
1789	59	(5)
1790	144	(22)
1791	54	(35)
1792	80	(5)
1793	55	(15)
1794	70	(1)
1795	50	(1)
1796	54	(7)
1797	54	(33)
1798	78	(3)
1799	57	(6)
1800	60	(22)
1801	75	(20)
1802	60	(9)
1803	50	(1)
1804	50	(6)
1805	65	(7)
1806	50	(7)
1807	50	(9)
1808	60	(1)
1809	50	(9)
1810	60	(11)
1811	70	(37)
1812	65	(11)
1813	50	(9)
1814	70	(11)
1815	65	(9)
1816	50	(11)
1817	50	(11)
1818	75	(9)
1819	68	(11)
1820	50	(1)
1821	55	(9)
1822	55	(30)
1823	50	(46)
1824	60	(46)
1825	80	(44)
1826	65	(5)
1827	80	(20)
1828	75	(44)
1829	55	(7)
1830	50	(4)
1831	60	(7)
1832	65	(5)

Stock No.	DBH	Code No.
1833	60	(13)
1834	50	(9)
1835	56	(9)
1836	50	(4)
1837	69	(4)
1838	56	(7)
1839	52	(4)
1840	50	(4)
1841	50	(46)
1842	60	(9)
1843	65	(30)
1844	54	(4)
1845	50	(9)
1846	50	(9)
1847	50	(9)
1848	50	(11)
1849	65	(30)
1850	50	(46)
1851	60	(4)
1852	75	(24)
1853	50	(7)
1854	52	(9)
1855	65	(9)
1856	66	(9)
1857	55	(9)
1858	70	(9)
1859	75	(30)
1860	50	(9)
1861	50	(3)
1862	50	(35)
1863	55	(9)
1864	64	(20)
1865	50	(9)
1866	60	(30)
1867	65	(9)
1868	50	(23)
1869	60	(11)
1870	50	(1)
1871	50	(5)
1872	60	(11)
1873	50	(9)
1874	65	(11)
1875	65	(9)
1876	60	(20)
1877	55	(20)
1878	50	(11)
1879	50	(23)
1880	50	(32)
1881	60	(20)
1882	55	(7)
1883	70	(9)
1884	70	(11)
1885	50	(11)
1886	60	(9)
1887	55	(20)
1888	75	(1)
1889	50	(9)
1890	65	(20)
1891	50	(1)
1892	50	(24)
1893	60	(20)
1894	65	(20)
1895	55	(20)
1896	55	(9)
1897	70	(1)
1898	60	(46)
1899	55	(1)
1900	90	(4)
1901	70	(9)
1902	70	(7)
1903	50	(11)
1904	60	(1)
1905	50	(14)
1906	50	(9)
1907	50	(46)
1908	55	(4)
1909	55	(11)
1910	50	(30)
1911	60	(35)
1912	50	(11)
1913	50	(9)
1914	65	(1)
1915	60	(9)
1916	50	(3)
1917	50	(9)
1918	60	(20)
1919	50	(35)
1920	50	(9)
1921	50	(11)
1922	50	(35)
1923	70	(9)
1924	50	(9)
1925	55	(7)
1926	65	(11)
1927	65	(21)
1928	55	(1)
1929	50	(35)
1930	75	(35)
1931	70	(24)
1932	55	(35)
1933	90	(14)
1934	50	(32)

Stock No.	DBH	Code No.
1935	70	(24)
1936	85	(24)
1937	70	(35)
1938	60	(9)
1939	61	(13)
1940	55	(9)
1941	85	(22)
1942	70	(1)
1943	50	(7)
1944	55	(40)
1945	50	(9)
1946	50	(30)
1947	50	(46)
1948	70	(3)
1949	60	(7)
1950	50	(9)
1951	60	(30)
1952	55	(32)
1953	55	(1)
1954	50	(46)
1955	53	(9)
1956	55	(9)
1957	54	(40)
1958	56	(46)
1959	50	(13)
1960	65	(1)
1961	50	(9)
1962	60	(14)
1963	50	(1)
1964	70	(22)
1965	50	(22)
1966	55	(4)
1967	75	(33)
1968	50	(9)
1969	60	(9)
1970	65	(4)
1971	70	(1)
1972	50	(1)
1973	60	(1)
1974	70	(1)
1975	70	(33)
1976	55	(1)
1977	70	(22)
1978	70	(13)
1979	60	(1)
1980	60	(9)
1981	75	(1)
1982	60	(1)
1983	55	(1)
1984	60	(1)
1985	120	(22)

Stock No.	DBH	Code No.
1986	65	(1)
1987	70	(1)
1988	60	(14)
1989	70	(9)
1990	66	(1)
1991	50	(22)
1992	70	(1)
1993	70	(6)
1994	50	(1)
1995	50	(30)
1996	69	(9)
1997	50	(1)
1998	70	(22)
1999	50	(1)
2000	50	(9)
2001	65	(18)
2002	76	(1)
2003	54	(6)
2004	50	(33)
2005	80	(9)
2006	67	(9)
2007	90	(9)
2008	70	(9)
2009	120	(22)
2010	50	(15)
2011	65	(24)
2012	86	(24)
2013	120	(22)
2014	60	(9)
2015	69	(33)
2016	52	(9)
2017	50	(9)
2018	53	(9)
2019	54	(1)
2020	50	(9)
2021	55	(4)
2022	66	(33)
2023	70	(9)
2024	62	(1)
2025	82	(4)
2026	68	(15)
2027	65	(9)
2028	60	(11)
2029	50	(7)
2030	65	(7)
2031	65	(30)
2032	150	(22)
2033	75	(7)
2034	50	(9)
2035	55	(9)
2036	60	(9)

Stock No.	DBH	Code No.
2037	120	(22)
2038	68	(46)
2039	50	(9)
2040	50	(28)
2041	62	(9)
2042	59	(6)
2043	80	(7)
2044	54	(7)
2045	64	(9)
2046	67	(6)
2047	85	(9)
2048	50	(7)
2049	90	(20)
2050	60	(9)
2051	66	(9)
2052	54	(9)
2053	50	(9)
2054	50	(9)
2055	52	(28)
2056	67	(1)
2057	70	(9)
2058	56	(9)
2059	53	(9)
2060	58	(30)
2061	50	(9)
2062	60	(30)
2063	54	(9)
2064	52	(6)
2065	55	(9)
2066	85	(1)
2067	63	(9)
2068	100	(2)
2069	90	(24)
2070	63	(15)
2071	74	(9)
2072	65	(1)
2073	54	(35)
2074	50	(1)
2075	75	(9)
2076	65	(1)
2077	80	(7)
2078	70	(9)
2079	69	(9)
2080	58	(7)
2081	60	(7)
2082	120	(4)
2083	57	(4)
2084	60	(1)
2085	80	(9)
2086	50	(46)
2087	64	(7)

Stock No.	DBH	Code No.
2088	55	(7)
2089	68	(9)
2090	50	(9)
2091	70	(9)
2092	60	(9)
2093	52	(9)
2094	65	(7)
2095	55	(1)
2096	58	(9)
2097	60	(1)
2098	62	(33)
2099	53	(9)
2100	80	(9)
2101	75	(20)
2102	55	(9)
2103	85	(9)
2104	60	(1)
2105	63	(9)
2106	75	(9)
2107	65	(9)
2108	60	(9)
2109	60	(9)
2110	75	(2)
2111	90	(1)
2112	56	(7)
2113	85	(9)
2114	59	(7)
2115	60	(7)
2116	70	(9)
2117	75	(2)
2118	70	(9)
2119	75	(9)
2120	54	(9)
2121	77	(6)
2122	60	(1)
2123	55	(9)
2124	60	(7)
2125	63	(1)
2126	59	(9)
2127	55	(9)
2128	57	(9)
2129	63	(9)
2130	55	(9)
2131	55	(9)
2132	60	(9)
2133	60	(9)
2134	70	(9)
2135	61	(9)
2136	65	(1)
2137	60	(9)
2138	70	(9)

Stock No.	DBH	Code No.
2139	80	(9)
2140	58	(9)
2141	55	(7)
2142	80	(2)
2143	56	(1)
2144	64	(1)
2145	58	(9)
2186	53	(9)
2187	62	(9)
2188	60	(35)
2189	57	(9)
2190	56	(9)
2191	68	(7)
2192	58	(33)
2193	70	(9)
2194	73	(1)
2195	74	(9)
2196	55	(1)
2197	60	(1)
2198	85	(9)
2199	50	(35)
2200	58	(22)
2201	50	(9)
2202	99	(13)
2203	50	(9)
2204	69	(7)
2205	80	(9)
2206	70	(4)
2207	56	(7)
2208	70	(32)
2209	71	(4)
2210	52	(30)
2211	65	(22)
2212	65	(1)
2213	61	(7)
2214	70	(32)
2215	52	(9)
2216	71	(2)
2217	51	(36)
2218	50	(22)
2219	60	(30)
2220	55	(9)
2221	56	(22)
2222	53	(30)
2223	50	(9)
2224	68	(1)
2225	60	(33)
2226	52	(4)
2227	120	(32)
2228	60	(35)
2229	52	(4)

Stock No.	DBH	Code No.
2230	54	(4)
2231	55	(35)
2232	70	(7)
2233	75	(1)
2234	70	(9)
2235	55	(4)
2236	56	(9)
2237	55	(9)
2238	64	(9)
2239	70	(9)
2240	50	(9)
2241	52	(9)
2242	60	(5)
2243	50	(32)
2244	60	(9)
2245	71	(1)
2246	50	(6)
2247	59	(30)
2248	50	(7)
2249	70	(9)
2250	59	(20)
2251	50	(35)
2252	55	(9)
2253	90	(30)
2254	50	(24)
2255	70	(22)
2256	55	(5)
2257	50	(9)
2258	55	(17)
2259	60	(9)
2260	50	(9)
2261	65	(1)
2262	65	(14)
2263	60	(22)
2264	75	(4)
2265	68	(15)
2266	54	(22)
2267	65	(9)
2268	65	(1)
2269	70	(30)
2270	52	(35)
2271	60	(7)
2272	60	(9)
2273	80	(27)
2274	120	(2)
2275	90	(4)
2276	70	(9)
2277	64	(26)
2278	65	(9)
2279	70	(6)
2280	88	(9)

Stock No.	DBH	Code No.
2281	70	(22)
2282	60	(7)
2283	80	(9)
2284	60	(9)
2285	57	(9)
2286	50	(43)
2287	60	(9)
2288	55	(9)
2289	55	(7)
2290	50	(9)
2291	80	(9)
2292	55	(9)
2293	52	(9)
2294	55	(9)
2295	88	(22)
2296	100	(24)
2297	80	(22)
2298	52	(9)
2299	70	(9)
2300	55	(9)
2301	60	(9)
2302	60	(9)
2303	60	(9)
2304	70	(7)
2305	65	(9)
2306	56	(9)
2307	85	(1)
2308	60	(32)
2309	90	(9)
2310	60	(1)
2311	65	(7)
2312	85	(1)
2313	88	(9)
2314	62	(1)
2315	70	(9)
2316	65	(1)
2317	80	(9)
2318	50	(1)
2319	60	(9)
2320	50	(9)
2321	90	(9)
2322	53	(1)
2323	60	(9)
2324	60	(9)
2325	66	(1)
2326	55	(9)
2327	70	(9)
2328	80	(9)
2329	60	(9)
2330	60	(9)
2331	75	(5)

Stock No.	DBH	Code No.
2332	70	(9)
2333	60	(46)
2334	60	(1)
2335	80	(12)
2336	58	(9)
2337	70	(9)
2338	80	(9)
2339	60	(9)
2340	50	(9)
2341	50	(9)
2342	100	(24)
2343	50	(7)
2344	50	(9)
2345	60	(11)
2346	60	(9)
2347	50	(9)
2348	50	(7)
2349	80	(46)
2350	50	(20)
2351	80	(9)
2352	75	(9)
2353	55	(9)
2354	90	(1)
2355	60	(9)
2356	70	(7)
2357	65	(1)
2358	85	(9)
2359	60	(1)
2360	50	(9)
2361	60	(9)
2362	78	(9)
2363	70	(1)
2364	50	(9)
2365	60	(9)
2366	70	(7)
2367	78	(1)
2368	60	(1)
2401	65	(1)
2402	52	(1)
2403	70	(1)
2404	50	(1)
2405	70	(1)
2406	53	(1)
2407	62	(22)
2408	75	(9)
2409	60	(1)
2410	63	(1)
2411	63	(1)
2412	60	(43)
2413	55	(1)
2414	62	(32)

Stock No.	DBH	Code No.
2415	60	(19)
2416	66	(1)
2417	50	(30)
2418	60	(9)
2419	70	(1)
2420	52	(9)
2421	82	(1)
2422	70	(22)
2423	55	(1)
2424	62	(43)
2425	61	(6)
2426	99	(3)
2427	52	(6)
2428	50	(22)
2430	53	(7)
2431	85	(22)
2432	51	(30)
2433	60	(1)
2434	80	(22)
2435	65	(2)
2436	120	(3)
2437	50	(22)
2438	60	(2)
2439	50	(1)
2440	57	(9)
2441	68	(40)
2442	80	(2)
2443	80	(13)
2444	51	(1)
2445	63	(1)
2446	70	(22)
2447	65	(22)
2448	52	(22)
2449	40	(2)
2450	70	(1)
2451	64	(13)
2452	55	(1)
2453	50	(30)
2454	60	(9)
2455	55	(14)
2456	50	(9)
2457	55	(33)
2458	50	(7)
2459	75	(9)
2460	80	(22)
2461	85	(9)
2462	65	(9)
2463	70	(30)
2464	75	(11)
2465	50	(7)
2466	50	(6)

Stock No.	DBH	Code No.
2467	50	(1)
2468	80	(9)
2469	50	(9)
2470	90	(9)
2471	50	(9)
2472	50	(35)
2473	65	(9)
2474	70	(1)
2475	65	(9)
2476	60	(22)
2477	50	(9)
2478	60	(1)
2479	60	(1)
2480	60	(1)
2481	50	(1)
2482	70	(1)
2483	52	(9)
2484	95	(22)
2485	72	(2)
2486	75	(30)
2487	50	(1)
2488	73	(33)
2489	60	(22)
2490	50	(1)
2491	65	(1)
2492	60	(1)
2493	63	(30)
2494	82	(1)
2495	50	(4)
2496	62	(22)
2497	50	(1)
2498	62	(1)
2499	50	(1)
2500	60	(7)
2501	62	(9)
2502	90	(1)
2503	60	(43)
2504	75	(1)
2505	53	(9)
2506	50	(7)
2507	50	(9)
2508	50	(7)
2509	50	(7)
2510	90	(1)
2511	60	(1)
2512	55	(9)
2513	70	(1)
2514	75	(4)
2515	60	(9)
2516	80	(1)
2517	56	(9)

Stock No.	DBH	Code No.
2518	53	(9)
2519	60	(4)
2520	50	(22)
2521	70	(1)
2522	70	(20)
2523	60	(24)
2524	60	(1)
2525	64	(1)
2526	70	(22)
2527	50	(37)
2528	65	(9)
2529	50	(1)
2530	120	(3)
2531	60	(9)
2532	65	(1)
2533	92	(24)
2534	55	(1)
2535	60	(11)
2536	65	(1)
2537	55	(22)
2538	60	(1)
2539	85	(22)
2540	60	(2)
2541	90	(1)
2542	50	(14)
2543	50	(6)
2544	50	(9)
2545	130	(22)
2546	50	(1)
2547	50	(1)
2548	60	(1)
2549	90	(22)
2550	55	(37)
2551	50	(43)
2552	50	(3)
2553	70	(19)
2554	52	(1)
2555	53	(9)
2556	70	(1)
2557	60	(1)
2558	73	(9)
2559	75	(9)
2560	61	(9)
2561	70	(9)
2562	75	(9)
2563	50	(7)
2564	95	(9)
2565	76	(1)
2566	76	(9)
2567	80	(9)
2568	79	(33)

Stock No.	DBH	Code No.
2569	60	(9)
2570	70	(9)
2571	55	(9)
2572	90	(9)
2573	60	(9)
2574	71	(1)
2575	70	(5)
2576	80	(9)
2577	52	(9)
2578	55	(9)
2579	52	(33)
2580	60	(9)
2581	71	(9)
2582	77	(1)
2583	60	(9)
2584	55	(43)
2585	65	(9)
2586	65	(33)
2587	58	(30)
2588	60	(9)
2589	70	(1)
2590	82	(24)
2591	75	(9)
2592	70	(9)
2593	70	(9)
2594	84	(9)
2595	75	(11)
2596	57	(9)
2597	90	(9)
2598	50	(9)
2599	60	(1)
2600	60	(9)
2601	57	(28)
2602	55	(1)
2603	64	(44)
2604	65	(42)
2605	53	(36)
2606	52	(22)
2607	54	(1)
2608	55	(22)
2609	66	(22)
2610	66	(1)
2611	53	(21)
2612	51	(33)
2613	52	(43)
2614	57	(7)
2615	53	(9)
2616	61	(1)
2617	57	(7)
2618	71	(1)
2619	81	(1)

Stock No.	DBH	Code No.
2620	40	(13)
2621	50	(9)
2622	57	(1)
2623	59	(1)
2624	69	(1)
2625	52	(2)
2626	70	(7)
2627	72	(9)
2628	50	(1)
2629	54	(9)
2630	70	(7)
2631	60	(9)
2632	62	(11)
2633	64	(14)
2634	90	(9)
2635	57	(9)
2636	56	(7)
2637	140	(22)
2638	66	(9)
2639	59	(33)
2640	65	(9)
2641	54	(22)
2642	62	(28)
2643	60	(9)
2644	50	(7)
2645	50	(9)
2646	60	(2)
2647	67	(7)
2648	50	(9)
2649	60	(9)
2650	70	(24)
2651	75	(9)
2652	70	(22)
2653	65	(9)
2654	90	(9)
2655	50	(9)
2656	66	(33)
2657	68	(9)
2658	70	(22)
2659	60	(9)
2660	55	(9)
2661	52	(6)
2662	60	(1)
2663	60	(9)
2664	55	(1)
2665	113	(1)
2666	65	(9)
2667	64	(1)
2668	60	(9)
2669	75	(1)
2670	55	(9)

Stock No.	DBH	Code No.
2671	54	(7)
2672	58	(22)
2673	52	(9)
2674	59	(9)
2675	99	(46)
2676	63	(9)
2677	55	(1)
2678	64	(9)
2679	50	(7)
2680	55	(9)
2681	55	(9)
2682	75	(9)
2683	54	(6)
2684	70	(9)
2685	58	(1)
2686	51	(1)
2687	58	(9)
2688	83	(1)
2689	70	(7)
2690	63	(1)
2691	71	(22)
2692	65	(9)
2693	52	(1)
2694	62	(1)
2695	50	(1)
2696	75	(9)
2697	64	(9)
2698	85	(2)
2699	80	(9)
2700	80	(4)
2701	80	(9)
2702	70	(9)
2703	120	(9)
2704	92	(9)
2705	74	(9)
2706	51	(9)
2707	70	(2)
2708	60	(1)
2709	50	(22)
2710	55	(22)
2711	62	(9)
2712	100	(10)
2713	60	(9)
2714	53	(9)
2715	76	(1)
2716	50	(9)
2717	73	(46)
2718	54	(7)
2719	65	(9)
2720	70	(1)
2721	81	(9)

Stock No.	DBH	Code No.
2722	53	(11)
2723	50	(14)
2724	60	(9)
2725	53	(7)
2726	77	(1)
2727	97	(1)
2728	75	(24)
2729	122	(22)
2730	58	(9)
2731	61	(9)
2732	68	(9)
2733	67	(9)
2734	65	(9)
2735	54	(1)
2736	60	(9)
2737	70	(9)
2738	77	(46)
2739	58	(9)
2740	52	(9)
2741	50	(9)
2742	80	(9)
2743	52	(9)
2744	75	(12)
2745	53	(46)
2746	95	(9)
2747	65	(9)
2748	65	(1)
2749	130	(22)
2750	90	(1)
2751	95	(22)
2752	65	(9)
2753	82	(10)
2754	50	(1)
2755	57	(9)
2756	58	(1)
2757	51	(1)
2758	90	(1)
2759	55	(33)
2760	56	(1)
2761	75	(30)
2762	70	(7)
2763	68	(7)
2764	60	(9)
2765	62	(7)
2801	60	(9)
2802	52	(9)
2803	55	(22)
2804	80	(1)
2805	60	(43)
2806	50	(1)
2807	60	(3)

Stock No.	DBH	Code No.
2808	57	(46)
2809	55	(30)
2810	50	(1)
2811	50	(1)
2812	54	(1)
2813	54	(1)
2814	50	(9)
2815	57	(9)
2816	75	(30)
2817	96	(1)
2818	80	(1)
2819	53	(6)
2820	67	(30)
2821	65	(1)
2822	55	(33)
2823	81	(1)
2824	80	(22)
2825	50	(22)
2826	55	(30)
2827	73	(5)
2828	63	(30)
2829	70	(22)
2830	80	(22)
2831	55	(43)
2832	91	(5)
2833	70	(22)
2834	65	(22)
2835	70	(9)
2836	55	(20)
2837	55	(9)
2838	75	(11)
2839	60	(22)
2840	60	(30)
2841	62	(9)
2842	67	(1)
2843	100	(1)
2844	58	(7)
2845	100	(1)
2846	95	(1)
2847	80	(22)
2848	60	(37)
2849	64	(1)
2850	60	(1)
2851	60	(1)
2852	50	(25)
2853	53	(9)
2854	52	(33)
2855	150	(21)
2856	56	(1)
2857	67	(7)
2858	65	(35)

Stock No.	DBH	Code No.
2859	70	(13)
2860	68	(9)
2861	50	(7)
2862	60	(6)
2863	58	(9)
2864	60	(9)
2865	77	(1)
2866	60	(1)
2867	85	(1)
2868	145	(17)
2869	65	(7)
2870	62	(46)
2871	110	(9)
2872	80	(33)
2873	50	(1)
2874	65	(1)
2875	86	(6)
2876	70	(9)
2877	90	(24)
2878	50	(9)
2879	85	(4)
2880	130	(22)
2881	53	(9)
2882	65	(1)
2883	85	(9)
2884	120	(9)
2885	81	(1)
2886	110	(22)
2887	75	(9)
2888	60	(9)
2889	100	(2)
2890	60	(9)
2891	60	(9)
2892	60	(33)
2893	50	(1)
2894	70	(3)
2895	60	(22)
2896	60	(22)
2897	70	(1)
2898	90	(2)
2899	80	(3)
2900	54	(30)
2901	50	(1)
2902	70	(1)
2903	58	(9)
2904	60	(22)
2905	55	(1)
2906	58	(9)
2907	50	(24)
2908	75	(9)
2909	57	(1)
2910	69	(1)
2911	70	(9)
2912	60	(11)
2913	60	(11)
2914	59	(9)
2915	71	(46)
2916	60	(9)
2917	55	(9)
2918	74	(9)
2919	80	(9)
2920	57	(1)
2921	58	(1)
2922	64	(9)
2923	58	(7)
2924	60	(9)
2925	60	(22)
2926	70	(22)
2927	75	(1)
2928	81	(30)
2929	74	(46)
2930	68	(9)
2931	78	(9)
2932	50	(7)
2933	68	(9)
2934	79	(1)
2935	79	(1)
2936	56	(9)
2937	60	(9)
2938	69	(1)
2939	80	(1)
2940	96	(46)
2941	70	(30)
2942	70	(9)
2943	60	(22)
2944	70	(22)
2945	68	(9)
2946	65	(1)
2947	55	(7)
2948	55	(1)
2949	57	(24)
2950	100	(2)
2951	90	(2)
2952	60	(9)
2953	78	(22)
2954	83	(1)
2955	77	(1)
2956	55	(9)
2957	60	(22)
3024	60	(22)
3025	51	(9)
3026	80	(5)

Stock No.	DBH	Code No.
3027	60	(9)
3028	81	(46)
3029	64	(30)
3030	68	(5)
3031	54	(9)
3032	60	(9)
3033	58	(33)
3034	54	(22)
3035	70	(1)
3036	50	(11)
3037	50	(1)
3038	65	(9)
3039	58	(22)
3040	61	(2)
3041	70	(1)
3042	60	(46)
3043	90	(3)
3044	55	(33)
3045	50	(22)
3046	75	(4)
3047	88	(22)
3048	80	(9)
3049	67	(11)
3050	50	(5)
3051	70	(9)
3052	64	(9)
3053	62	(35)
3054	75	(9)
3055	52	(24)
3056	58	(7)
3057	55	(20)
3058	62	(22)
3059	77	(9)
3060	62	(22)
3061	50	(9)
3062	50	(1)
3063	50	(7)
3064	54	(1)
3065	52	(7)
3066	52	(9)
3067	56	(2)
3068	50	(9)
3069	65	(9)
3070	90	(9)
3071	80	(2)
3072	59	(9)
3073	60	(9)
3074	80	(1)
3075	60	(2)
3076	68	(24)
3077	64	(7)
3078	55	(9)
3079	60	(9)
3080	50	(9)
3081	70	(9)
3082	50	(1)
3083	50	(9)
3084	90	(24)
3085	75	(44)
3086	94	(24)
3087	52	(9)
3088	60	(9)
3089	84	(7)
3090	90	(46)
3091	64	(9)
3092	52	(1)
3093	86	(24)
3094	60	(1)
3095	70	(9)
3096	62	(46)
3097	60	(9)
3098	64	(9)
3099	54	(9)
3100	55	(9)
3101	85	(5)
3102	60	(9)
3103	60	(9)
3104	90	(1)
3105	54	(35)
3106	60	(9)
3107	75	(9)
3108	70	(7)
3109	70	(9)
3110	68	(9)
3111	64	(9)
3112	60	(35)
3113	54	(1)
3114	60	(9)
3115	120	(22)
3116	51	(1)
3117	60	(9)
3118	55	(43)
3119	70	(5)
3120	80	(13)
3121	50	(32)
3122	50	(46)
3123	55	(9)
3124	60	(35)
3125	90	(32)
3126	60	(43)
3127	60	(5)
3128	60	(5)