

**SPECIAL PURPOSE RADIATA PINE BREEDS
PERFORMANCE TRIALS
— ESTABLISHMENT REPORT**

G.T. Stovold

Report No. 10

April 1995

FOREST & FARM PLANTATION MANAGEMENT COOPERATIVE

EXECUTIVE SUMMARY

SPECIAL PURPOSE RADIATA PINE BREEDS PERFORMANCE TRIALS — ESTABLISHMENT REPORT

G.T. Stovold

Report No. 10

April 1995

This report details the establishment in 1992, of six special purpose radiata pine breeds performance trials located at Woodhill, Riverhead, Kaingaroa, Kinleith, Takitoa and Otago Coast Forests. The four breeds incorporated include the Highly Multinodal, Long Internode and High & Low wood density breeds. A GF6 and GF14 control seedlot have also been included. Each breed contains three pruned final crop stockings of 100, 200 and 400 stems per hectare and four unpruned final crop stockings of 200, 400, 600 and 1000 stems per hectare.

INTRODUCTION

Work Plan No. 2151 calls for a series of trials to evaluate the performance of special purpose breeds across regions.

Seedlots used in these trials were as follows:

A.	highly multinodal	878/15/2 and 91/296 mix	GF27
B.	uninodal	89/15/2	LI25(13)
C.	high density	91/294	GF18
D.	low density	91294	GF28

Along with 2 control seedlots:

E.	88/105	GF14
F.	88/102	GF6

Silvicultural treatments included a range of final; crop stockings, both pruned and unpruned (Table 1). The experimental design is an unbalanced split-split plot with one replication per site.

The Long-internode breed is presently being tested under Work Plan No. 1980, and it also occurs in trials of similar design to these planted over 13 sites during 1990 and 1992 under Work Plan 1633 and its addendum.

The highly-multinodal breed has had limited testing under a contract with Carter Holt Harvey Ltd.

VARIATIONS

Wenita Forestry, Otago Coast Forest has plot dimensions of 20m and 40m x 40m due to slash windrowing every 15m with each windrow being 5m wide (as opposed to 18m, 36m and 72m x 45m for all other sites).

City Forests, Takitoa block has 2 additional seedlots. These were as follows:

- G. Stock from Tasman Forestry's tissue culture operation. GF unknown. Planted in treatments 2, 3, and 6.
- H. City Forests own stock GF17, planted in treatments 2, 3, 4 (2x), 5, 6 and 7 and in addition to this one in 6 with planting to the side of the rip (Hps), and once in 7 between the rips (Hpm), to investigate the effect of ripping on possible tree toppling in the future. These last two additional plots need not be measured, just monitored for any increase in stability over planting directly in the rips.

Site maps, Trial location maps and establishment data for each site follow.

TRIAL DESCRIPTION SHEET

FOREST OWNER :	Carter Holt Harvey Forests Ltd	EXPT. NO. :	FR172/1
FOREST :	Woodhill	CPT. :	36
CONTROLLING AGENCY :	FRI-Genetics and Tree Improvement		
WORK PLAN # :	2151	PROJECT :	GTI 29/14 FRI CORR, File :
PURPOSE :	To compare performance of special purpose breeds across regions.		

SITE DETAILS :

ALTITUDE :	0m	ASPECT :		SLOPE :	0 - 5°
GROUND PREPARATION :	Roller Crushing of heads				
PREVIOUS USE :	Forest Plantation				

EXPERIMENT DETAILS :

SPECIES :	<i>P. radiata</i>	STOCK :	1/0	DATE PLANTED :	29/07/92
# OF PLOTS :		SIZE OF PLOTS :	36 x 45m	SPACING :	Various
PLOT AREA :		TOTAL AREA :		DEMARICATION :	Numbered posts

EXPERIMENTAL DESIGN:

Unbalanced split-split block

PROPOSED TREATMENT:

PROPOSED YEARS OF ASSESSMENT:	PERMANENCY:	30 Years
-------------------------------	-------------	----------

ATTACHMENTS:

Site Map
 Trial Map
 Code/Treatment Table

ESTABLISHMENT DATA

Trial No.: FR172/1

Contact Person: Lyndsay Cannon

Forest Owner: Carter Holt Harvey Ltd

Forest and Compartment: Woodhill, Cpt. 36

Stock type of surrounding Compartment: *P. radiata*

Seedlot # of surrounding compartment: GF17, 91/512

Latitude/ Longitude: S. Lat. 36°46' E. Long. 174°21'

Altitude: 0m

Soil type: Sand

Site preparation: Roller crushing of Slash

Weeds: Lupin

Regeneration:

Slope and aspect: 0 °

Make-up of planting gang: 8 Contractors

Dates planted: 29/07/92

Date seedlings lifted: 26/07/92

Previous land-use: Forest Plantation

Previous stock type if forest: *P. radiata*

Seedlot number:

Comments:

Map no 497

1992 Special purpose Breeds Trial

Woodhill Forest cpt 36

FR 172/1 WP 2151

7/B = Treatment/Seedlot

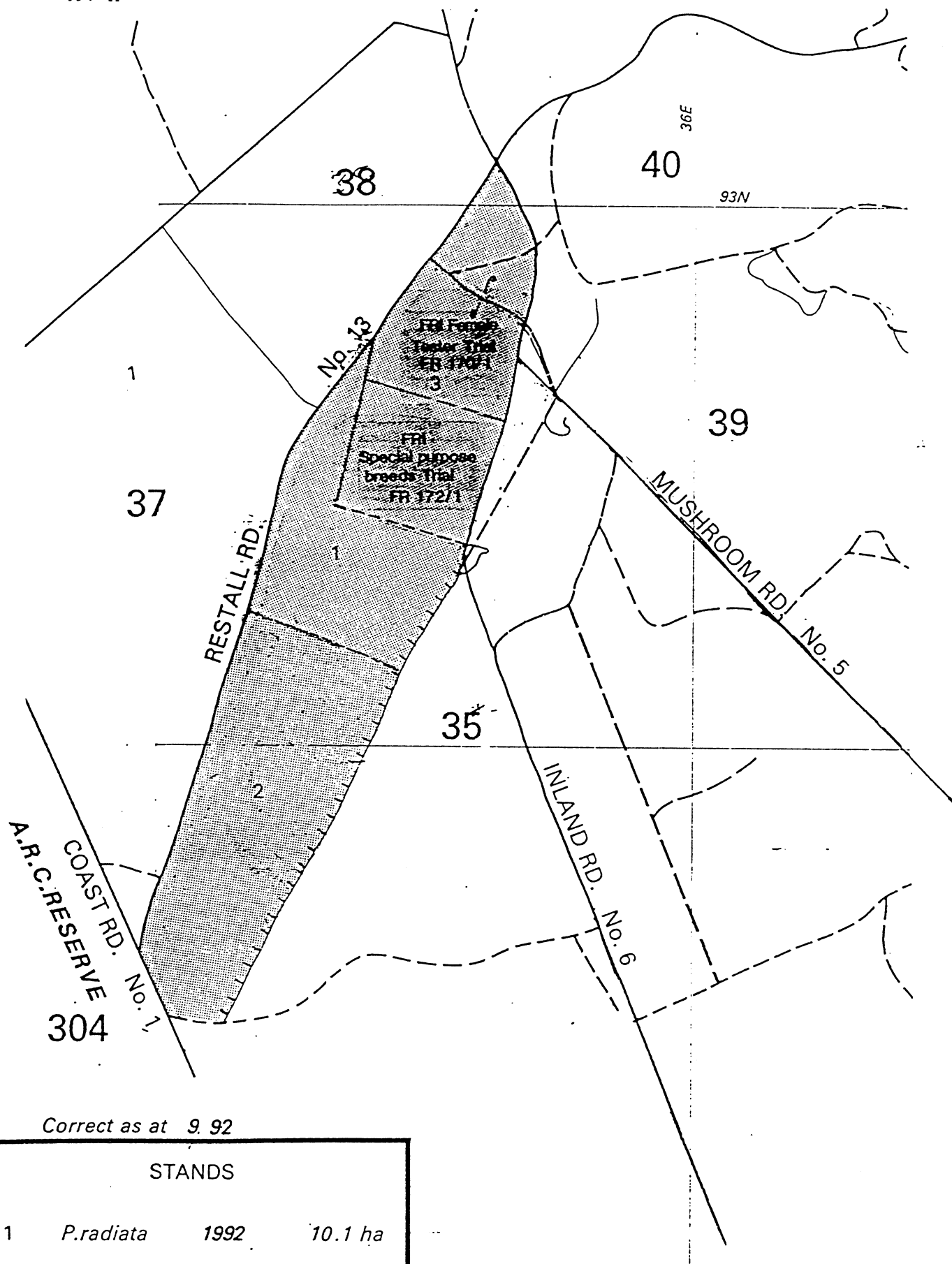
Inland rd

167	7B	188	7C	189	210	211
168	7D	187	7A	190	4D	4A
169	7E	186	5A	191	209	212
170	3A	185	5B	192	4B	4C
166	3E	171	3B	184	5C	193
165	3D	172	3C	183	5D	194
164		173		182		195
163	1A	174	1D	181	1E	196
162		175		180	2A	2D
161	1B	176	1C	179	2B	2C
160		177		178	200	201

1992 Female tester
trial FR 170/1

0 100m
Scale

July 1992



Correct as at 9.92

STANDS

1	<i>P.radiata</i>	1992	10.1 ha
2	<i>P.radiata</i>	1991	19.2 ha
3	<i>P.radiata</i>	1992	15.0 ha

7143

WOOD

Cpt. 36

SCALE 1:10000

Table 1:

Breed and Collection No.	GF	CODE	TREATMENTS							
			PRUNED				UNPRUNED			
				1	2	3	4	5	6	7
			Final Stocking	100*	200	400	200	400	600	1000
			Initial Stocking	250	500	1000	500	1000	1000	1000
			Initial Spacing (m)	5 x 8	5 x 4	5 x 2	5 x 4	5 x 2	5 x 2	5 x 2
Multinodal 91/297 and 91/296 mix	27	A	Outer Plot Size (ha)							
				.324	.162	.081	.162	.081	.081	0.81
Uninodal 89/15/2	LI25(13)	B		.324	.162	.081	.162	.081	.081	.081
High Density 91/523	18	C		.324	.162	.081	.162	.081	.081	.081
Low Density 91/294	28	D		.324	.162	.081	.162	.081	.081	.081
Control 1 88/105	14	E		.324	.162**	.081	.162	.081	.081	.081
Control 2 88/102	6	F			.162					.081

* There are no 100 spha final stocking treatments on the South Island sites

** There is no 2E treatment on the North Island sites.

TRIAL DESCRIPTION SHEET

FOREST OWNER : Carter Holt Harvey Forests Ltd EXPT. NO.: FR172/2
 FOREST: Riverhead CPT.: 25
 CONTROLLING AGENCY : FRI-Genetics and Tree Improvement
 WORK PLAN #: 2151 PROJECT: GTI 29/14 FRI CORR, File :
 PURPOSE : To compare performance of special purpose breeds across regions.

SITE DETAILS :

ALTITUDE : ASPECT : W SLOPE : 0 - 5°
 GROUND PREPARATION : Ripping at 5m centres. Burning of windrows
 PREVIOUS USE : Forest Plantation

EXPERIMENT DETAILS :

SPECIES : *P. radiata* STOCK : 1/0 DATE PLANTED: 29/07/92
 # OF PLOTS : SIZE OF PLOTS : 36 x 45m SPACING : Various
 PLOT AREA : TOTAL AREA : DEMARCATION : Numbered posts

EXPERIMENTAL DESIGN:

Unbalanced split-split block

PROPOSED TREATMENT:

PROPOSED YEARS OF ASSESSMENT: PERMANENCY: 30 Years

ATTACHMENTS:

Site Map
 Trial Map
 Code/Treatment Table

ESTABLISHMENT DATA

Trial No.: FR172/2

Contact Person: Lyndsay Cannon

Forest Owner: Carter Holt Harvey Ltd

Forest and Compartment: Riverhead, Cpt 25

Stock type of surrounding Compartment: *P. radiata*

Seedlot # of surrounding compartment: GF25 - cuttings

Latitude/ Longitude: S. Lat. 36°46' E. Long. 174°21'

Altitude:

Soil type: Clay

Site preparation: Ripping at 5m centres

Weeds: Gorse

Regeneration:

Slope and aspect: Flat - 5K Westerly slope

Make-up of planting gang: 8 Contractors

Dates planted: 29/07/92

Date seedlings lifted: 26/07/92

Previous land-use: Forest Plantation

Previous stock type if forest: *P. radiata*

Seedlot number:

Comments: site ripped to 70cm at 4m internal and oversown with grasses and maku.



15

A.R.C. WATER SUPPLY AREA.

STANDS			
2	C. macrocarpa	1930	0.5ha
4	P. rad	1964	0.3 ha
6	Ac. mel	1967	1.1 ha
9.1★	P. radiata	1974	74.2 ha
9.2			8.3 ha
11	P. radiata	1992	7.3 ha
12	P. radiata	1992	4.7 ha
★ PFL STANDS			

247

ARARIMU

VLY ROAD

BARLOW ROAD N:2

A 798

ANZAC

ROAD

N:15

7249

● A798/1-6

11

12

Riverhead Forest cpt 25
1992 Special purpose breeds
performance trial.
FR 172/2 WP 2151

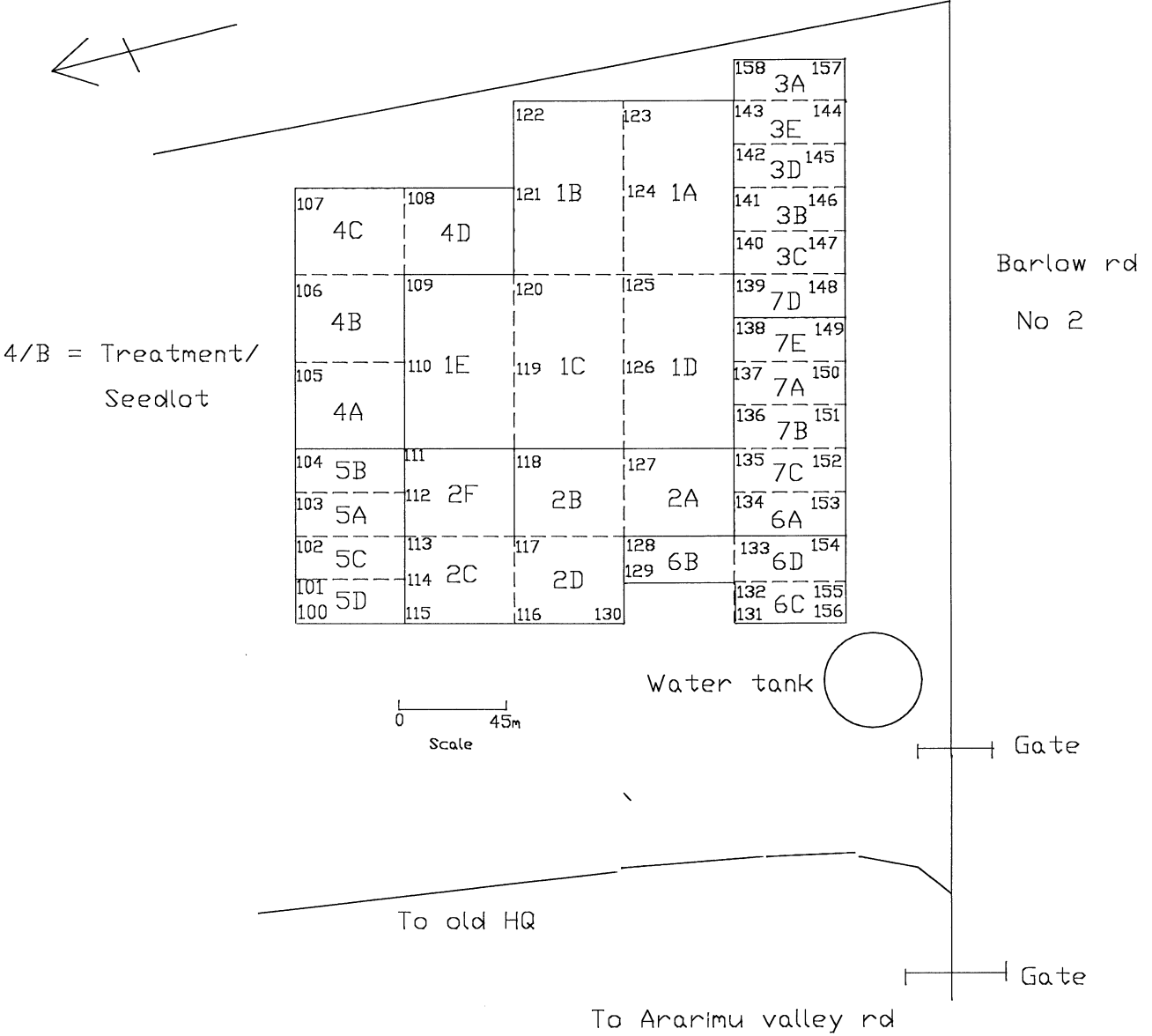


Table 1:

Breed and Collection No.	GF	CODE	TREATMENTS							
			PRUNED				UNPRUNED			
				1	2	3	4	5	6	7
			Final Stocking	100*	200	400	200	400	600	1000
			Initial Stocking	250	500	1000	500	1000	1000	1000
			Initial Spacing (m)	5 x 8	5 x 4	5 x 2	5 x 4	5 x 2	5 x 2	5 x 2
Multinodal 91/297 and 91/296 mix	27	A	Outer Plot Size (ha)							
				.324	.162	.081	.162	.081	.081	0.81
Uninodal 89/15/2	LI25(13)	B		.324	.162	.081	.162	.081	.081	.081
High Density 91/523	18	C		.324	.162	.081	.162	.081	.081	.081
Low Density 91/294	28	D		.324	.162	.081	.162	.081	.081	.081
Control 1 88/105	14	E		.324	.162**	.081	.162	.081	.081	.081
Control 2 88/102	6	F			.162					.081

* There are no 100 spha final stocking treatments on the South Island sites

** There is no 2E treatment on the North Island sites.

TRIAL DESCRIPTION SHEET

FOREST OWNER: Forestry Corporation

EXPT. NO.: FR172/3

FOREST: Kaingaroa

CPT.: 1276

CONTROLLING AGENCY: FRI-Genetics and Tree Improvement

WORK PLAN #: 2151

PROJECT: GTI 29/14 FRI CORR, File:

PURPOSE: To compare performance of special purpose breeds across regions.

SITE DETAILS:

ALTITUDE: 450m

ASPECT:

SLOPE: 0 - 15°

GROUND PREPARATION:

PREVIOUS USE: Forest Plantation

EXPERIMENT DETAILS:

SPECIES: *P. radiata*

STOCK: 1/0

DATE PLANTED: 16/07/92

OF PLOTS:

SIZE OF PLOTS: 36 x 45m

SPACING:

PLOT AREA:

TOTAL AREA:

DEMARCATIION: Numbered posts

EXPERIMENTAL DESIGN:

Unbalanced split-split block

PROPOSED TREATMENT:

PROPOSED YEARS OF ASSESSMENT:

PERMANENCY: 30 Years

ATTACHMENTS:

Site Map

Trial Map

Code/Treatment Table

ESTABLISHMENT DATA

Trial No.: FR172/3

Contact Person: Chris Insley

Forest Owner: Forest Corporation

Forest and Compartment: Kaingaroa, Cpt 1276

Stock type of surrounding Compartment: *P. radiata*

Seedlot # of surrounding compartment: 91/294

Latitude/ Longitude: S. Lat. 38°20' E. Long. 176°45'

Altitude: 450

Soil type: Black Scoria (Tarawera Ash) Ph6.2

Site preparation: Tordon/Escort Preplant and oversowing lotus/fog

Weeds: Grass/Toitoe/Buddleia

Regeneration:

Slope and aspect: 0 - 5°

Make-up of planting gang: 10 Contractors

Dates planted: 21/07/92

Date seedlings lifted: 15-16/07/92

Previous land-use: Forest Plantation

Previous stock type if forest: *P. radiata*

Seedlot number:

Comments:

FR EXPT: 172 SUB EXPT.: 3

Purpose: (100 characters maximum)

TO COMPARE PERFORMANCE OF SPECIAL PURPOSE SEEDLOTS ACROSS REGIONS

Species Codes:

P	.	R	A	D																				

Keywords: (up to 6 words or phrases of 35 characters)

SPECIAL PURPOSE BREEDS
FINAL CROP STOCKING
HIGHLY MULTINODAL BREED
LONG INTERNODE BREED
HIGH WOOD DENSITY BREED
LOW WOOD DENSITY BREED

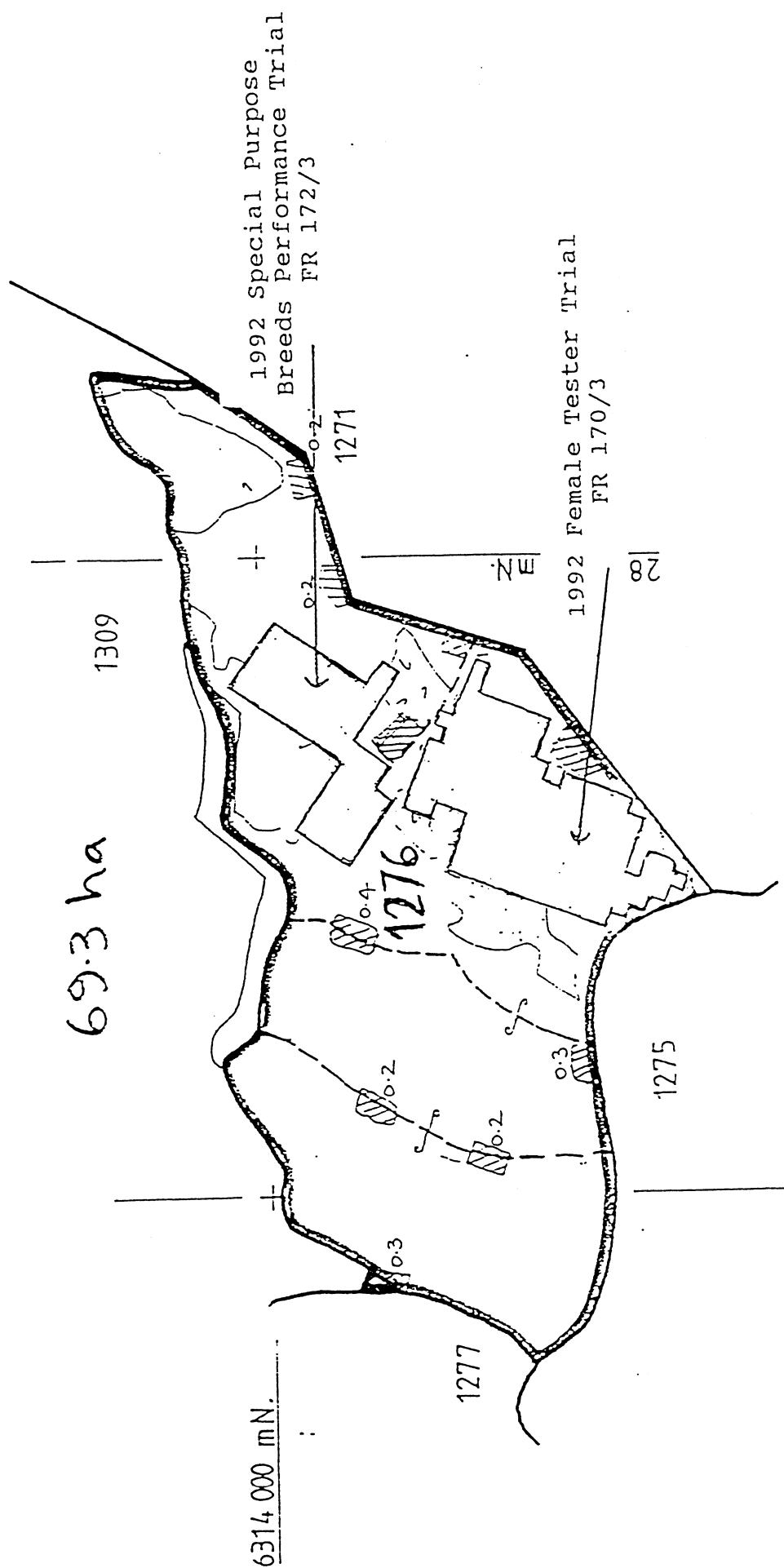
Experiment Start yr.	Current Plots	Plots Terminated	Control Agency	FRI related Projects	FRI WP/no.
1992			FRI		2151

[illegible]

Contact Officer:

[illegible]

KAINGAROA S.F. I
METRIC 1:10 000

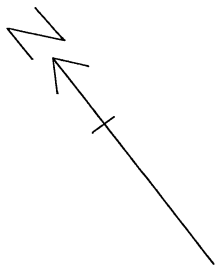


STAND	PPA	NSA
01	64.0	11.2.

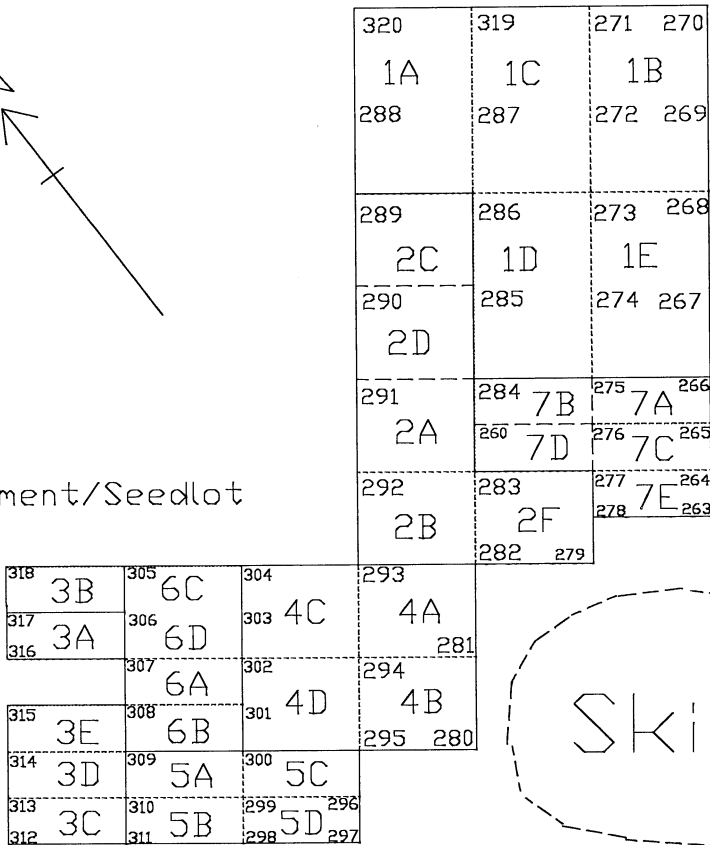
TOTAL COMPT. AREA	H-A	ACS.
-------------------	-----	------

1992 Special Purpose Breeds
Performance Trial

FR 172/3 WP 2151
cpt 1276 Kaingaroa Forest



4/A = Treatment/Seedlot



July 1992

Table 1:

Breed and Collection No.	GF	CODE	TREATMENTS							
			PRUNED				UNPRUNED			
				1	2	3	4	5	6	7
			Final Stocking	100*	200	400	200	400	600	1000
			Initial Stocking	250	500	1000	500	1000	1000	1000
			Initial Spacing (m)	5 x 8	5 x 4	5 x 2	5 x 4	5 x 2	5 x 2	5 x 2
Multinodal 91/297 and 91/296 mix	27	A	Outer Plot Size (ha)							
				.324	.162	.081	.162	.081	.081	0.81
Uninodal 89/15/2	LI25(13)	B		.324	.162	.081	.162	.081	.081	.081
High Density 91/523	18	C		.324	.162	.081	.162	.081	.081	.081
Low Density 91/294	28	D		.324	.162	.081	.162	.081	.081	.081
Control 1 88/105	14	E		.324	.162**	.081	.162	.081	.081	.081
Control 2 88/102	6	F			.162					.081

* There are no 100 spha final stocking treatments on the South Island sites

** There is no 2E treatment on the North Island sites.

TRIAL DESCRIPTION SHEET

FOREST OWNER: NZFP Forests Ltd

EXPT. NO.: FR172/4

FOREST: Kinlieth

CPT.: A6216

CONTROLLING AGENCY: FRI-Genetics and Tree Improvement

WORK PLAN #: 2151 PROJECT: GTI 29/14 FRI CORR, File :

PURPOSE: To compare performance of special purpose breeds across regions.

SITE DETAILS:

ALTITUDE: 400m

ASPECT:

SLOPE: 0 - 10°

GROUND PREPARATION:

PREVIOUS USE: 2 rotations

EXPERIMENT DETAILS:

SPECIES: *P. radiata*

STOCK: 1/0

DATE PLANTED: 09/07/92

OF PLOTS:

SIZE OF PLOTS: 36 x 45m

SPACING: Various

PLOT AREA:

TOTAL AREA:

DEMARICATION: Numbered posts

EXPERIMENTAL DESIGN:

Unbalanced split-split block

PROPOSED TREATMENT:

PROPOSED YEARS OF ASSESSMENT:

PERMANENCY: 30 Years

ATTACHMENTS:

Site Map

Trial Map

Code/Treatment Table

ESTABLISHMENT DATA

Trial No.: FR172/4 Contact Person: Fred Burger

Forest Owner: Carter Holt Harvey Forests Ltd

Forest and Compartment: Kinlieth, A6216

Stock type of surrounding Compartment: A stock - seedling

Seedlot # of surrounding compartment: A stock = 91/514

Latitude/ Longitude: S. Lat. 38°17' E. Long. 175°45'

Altitude: 1250 feet asl.

Soil type: no soils information

Site preparation: NIL

Weeds: Buddleia

Regeneration: yes

Slope and aspect: 0-15°

Make-up of planting gang: 13 CHH Contractors

Dates planted: 09/07/92

Date seedlings lifted: 06/07/92

Previous land-use: Forest plantation (2 rotations)

Previous stock type if forest: *P. radiata*

Seedlot number: unknown

Comments:

FR EXPT: 172 SUB EXPT.: 4

Purpose: (100 characters maximum)

TO COMPARE PERFORMANCE OF SPECIAL -
PURPOSE SEEDLOTS ACROSS REGIONS - - -
- - - - -

Species Codes:

P	.	R	A	D																				

Keywords: (up to 6 words or phrases of 35 characters)																										
S	P	E	C	I	A	L	P	U	R	P	O	S	E	B	R	E	E	D	S							
F	I	N	A	L	C	R	O	P	S	T	O	C	K	I	N	G										
H	I	G	H	L	Y	M	U	L	T	I	N	O	D	A	L	B	R	E	E	D						
L	O	N	G	I	N	T	E	R	N	O	D	E	B	R	E	E	D									
H	I	G	H	W	O	O	D	D	E	N	S	I	T	Y	B	R	E	E	D							
L	O	W	W	O	O	D	D	E	N	S	I	T	Y	B	R	E	E	D								

Experiment Start yr.	Current Plots	Plots Terminated	Control Agency	FRI related Projects	FRI WP/no.
1992			FRI		2151

Related Programs				

Contact Officer:

G T I

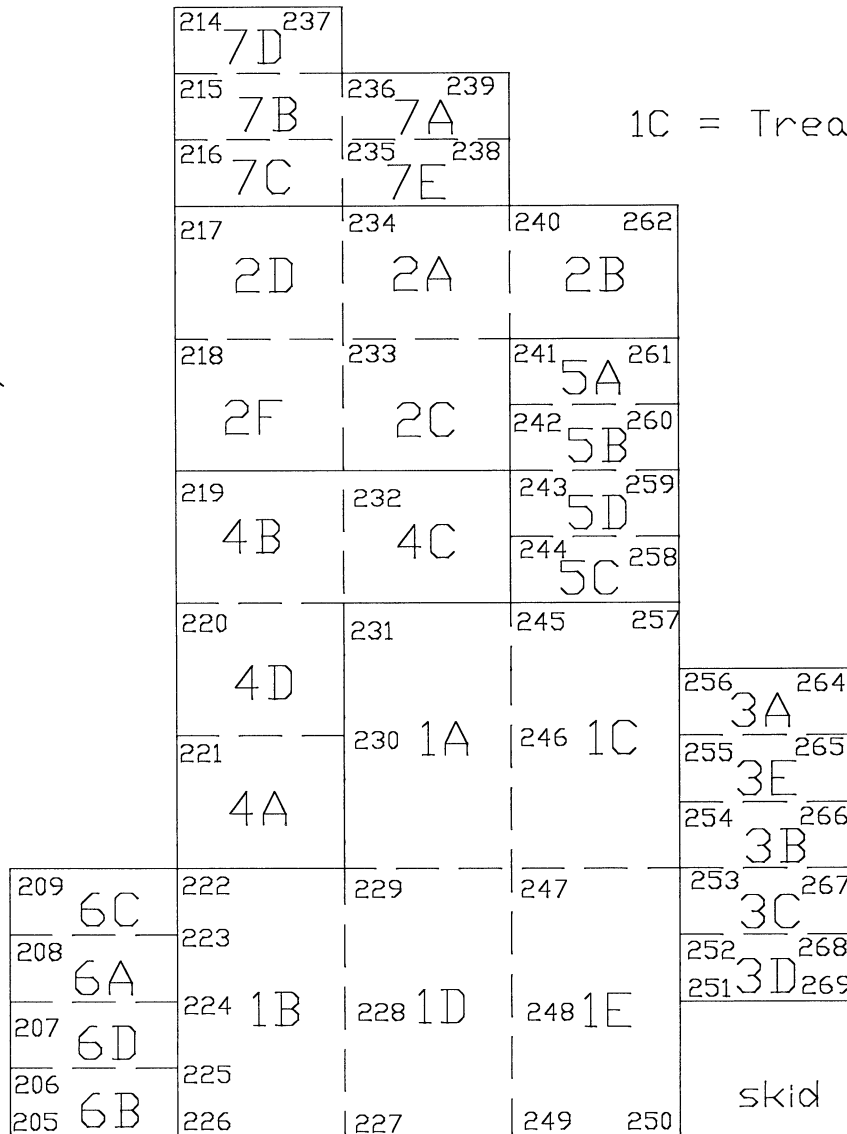
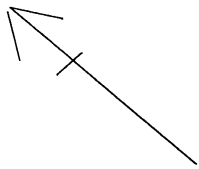
map no 500

1992 Special Purpose Breeds
Performance Trial
Kinleith Forest A6216

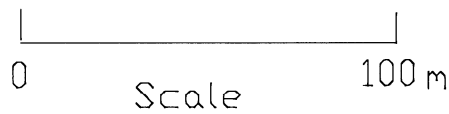
FR 172/4

WP 2151

1C = Treatment\Seedlot



to Waiohaka rd



July 1992

Table 1:

Breed and Collection No.	GF	CODE	TREATMENTS							
			PRUNED			UNPRUNED				
				1	2	3	4	5	6	7
			Final Stocking	100*	200	400	200	400	600	1000
			Initial Stocking	250	500	1000	500	1000	1000	1000
			Initial Spacing (m)	5 x 8	5 x 4	5 x 2	5 x 4	5 x 2	5 x 2	5 x 2
Multinodal 91/297 and 91/296 mix	27	A	Outer Plot Size (ha)	.324	.162	.081	.162	.081	.081	0.81
Uninodal 89/15/2	LI25(13)	B		.324	.162	.081	.162	.081	.081	.081
High Density 91/523	18	C		.324	.162	.081	.162	.081	.081	.081
Low Density 91/294	28	D		.324	.162	.081	.162	.081	.081	.081
Control 1 88/105	14	E		.324	.162**	.081	.162	.081	.081	.081
Control 2 88/102	6	F			.162					.081

* There are no 100 cobs

* There are no 100 spha final stocking treatments on the South Island sites

** There is no 2E treatment on the North Island sites.

TRIAL DESCRIPTION SHEET

FOREST OWNER : City Forests Ltd

EXPT. NO. : FR172/5

FOREST: Takitoa

CPT.: 5/01

CONTROLLING AGENCY : FRI-Genetics and Tree Improvement

WORK PLAN # : 2151

PROJECT: GTI 29 / 14 FRI CORR, File :

PURPOSE : To compare performance of special purpose breeds across regions.

SITE DETAILS :

ALTITUDE : 20-50m

ASPECT :

SLOPE : 0 - 15°

GROUND PREPARATION : Ripping at 5m centres

PREVIOUS USE : Ex Farm

EXPERIMENT DETAILS :

SPECIES : *P. radiata*

STOCK : 1/0

DATE PLANTED: 17/07/92

OF PLOTS :

SIZE OF PLOTS : 36 x 45m

SPACING :

PLOT AREA :

TOTAL AREA :

DEMARICATION : Numbered posts

EXPERIMENTAL DESIGN:

Unbalanced split-split block

PROPOSED TREATMENT:

PROSED YEARS OF ASSESSMENT:

PERMANENCY: 30 Years

ATTACHMENTS:

Site Map

Trial Map

Code/Treatment Table

ESTABLISHMENT DATA

Trial No.: FR172/5

Contact Person: Phil Taylor

Forest Owner: City Forests Ltd

Forest and Compartment: Takitoa, Cpt. 5/01

Stock type of surrounding Compartment: GF17

Seedlot # of surrounding compartment:

Latitude/ Longitude: S. Lat.

E. Long.

Altitude: 20-50 m.a.s.l.

Soil type:

Site preparation: Ripping 5m centres

Weeds: Improved pasture (grass)

Regeneration:

Slope and aspect: 0-15°

Make-up of planting gang: 8 contractors

Dates planted: 15-17/07/92

Date seedlings lifted: 13/07/92

Previous land-use: Farming

Previous stock type if forest:

Seedlot number:

Comments:

Register of Field Experiments

FR

EXPT:

172

SUB EXPT.:

5

Forest	Compartment	P/year	Total Area (ha.)
TAKI TOA	5/01	1992	4.37
Landowner			
City Forests LA			

Purpose: (100 characters maximum)

TO COMPARE PERFORMANCE OF SPECIAL PURPOSE SEEDLOTS ACROSS REGIONS

Species Codes:

P. RAD

Keywords: (up to 6 words or phrases of 35 characters)

SPECIAL PURPOSE BREEDS

FINAL CROP STOCKING

HIGHLY MULTIMODAL BREED

LONG INTERNODE BREED

HIGH WOOD DENSITY BREED

LOW WOOD DENSITY BREED

Experiment Start yr.	Current Plots	Plots Terminated	Control Agency	FRI related Projects	FRI WP/no.
1992	1		FRI		2151

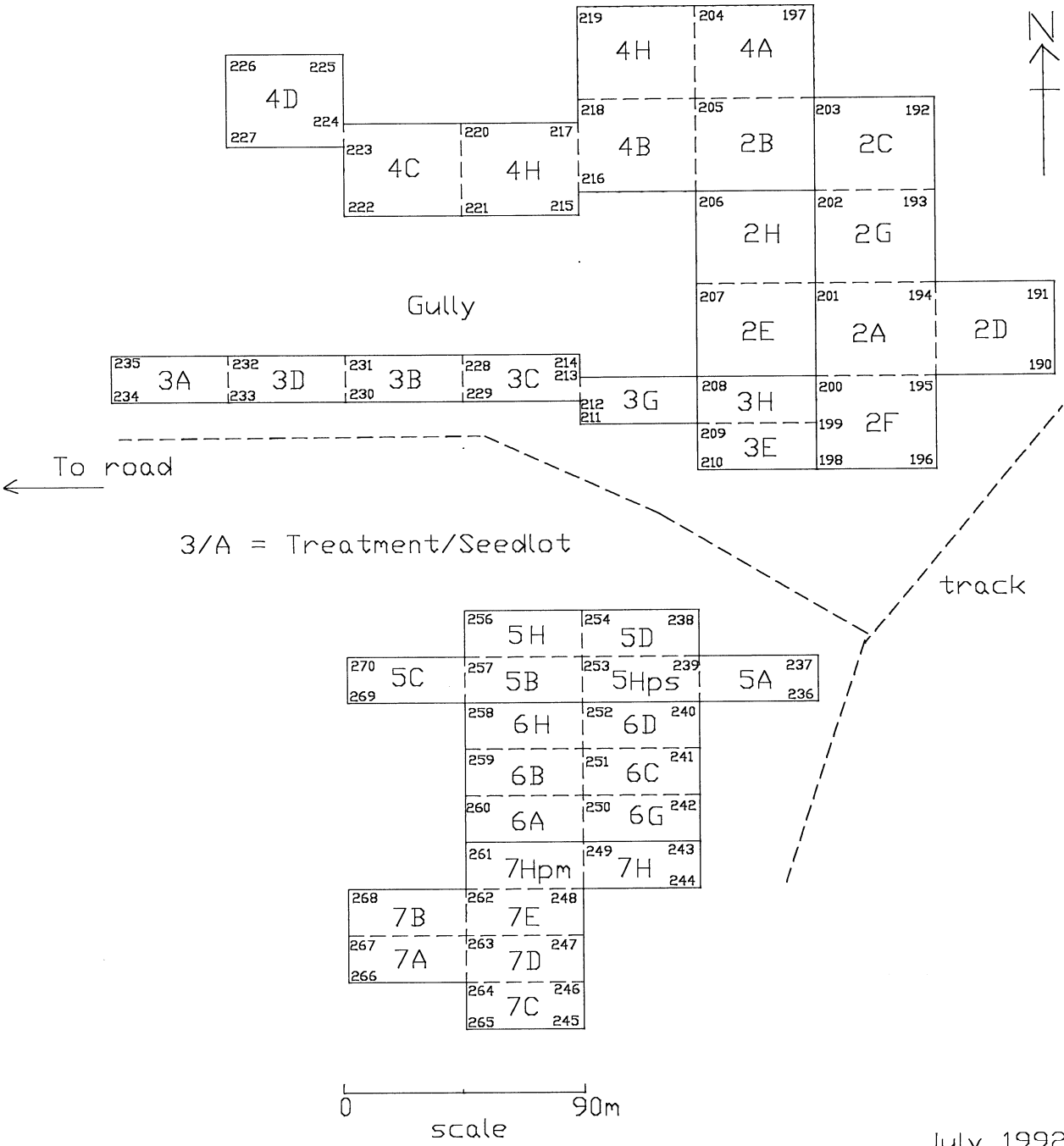
Related Programs

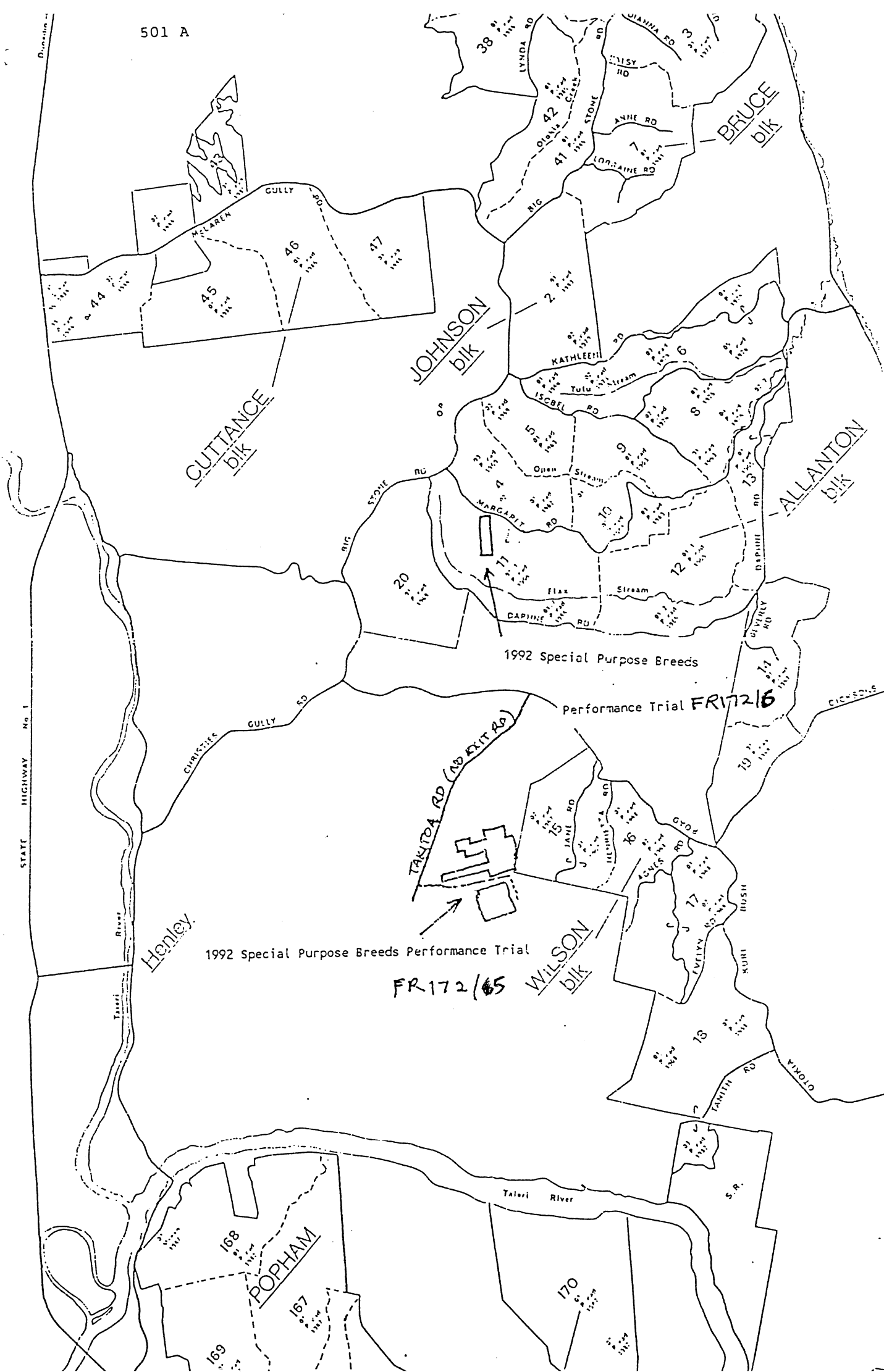
Contact Officer:

GTI

1992 Special Purpose Breeds Performance Trial
City Forests Ltd, Dunedin

FR 172/5 WP 2151





KORI BUSH
ROAD

TRIAL
AREA

TAKITOA ROAD (WEXIT RD)

1992 Special Purpose Breeds Performance Trial

CITY FORESTS LTD

TAKITOA FOREST

(Okapi)

N 635000

E 2935000

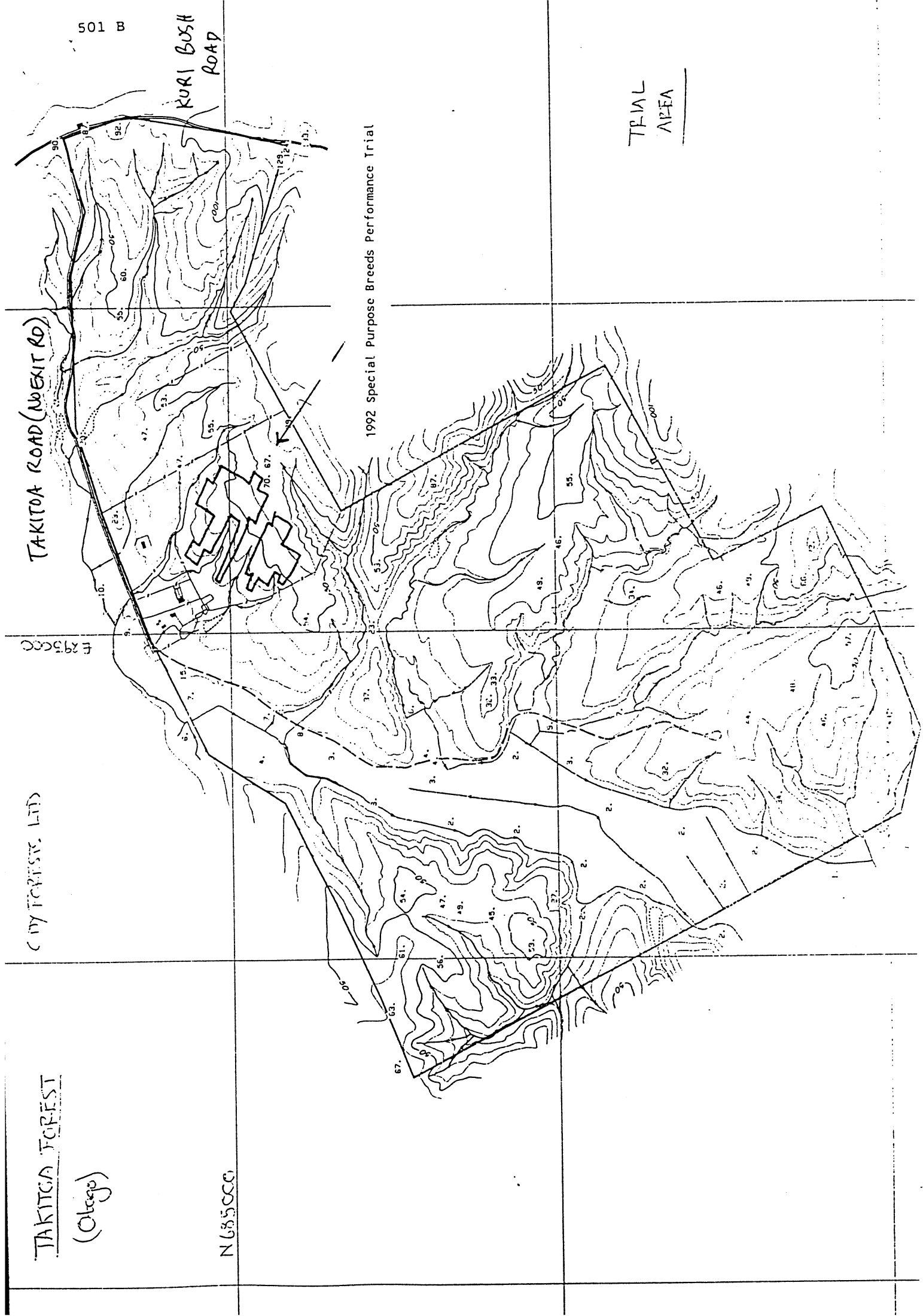


Table 1:

Breed and Collection No.	GF	CODE	TREATMENTS							
			PRUNED				UNPRUNED			
				1	2	3	4	5	6	7
			Final Stocking	100*	200	400	200	400	600	1000
			Initial Stocking	250	500	1000	500	1000	1000	1000
			Initial Spacing (m)	5 x 8	5 x 4	5 x 2	5 x 4	5 x 2	5 x 2	5 x 2
Multinodal 91/297 and 91/296 mix	27	A	Outer Plot Size (ha)							
				.324	.162	.081	.162	.081	.081	0.81
Uninodal 89/15/2	LI25(13)	B		.324	.162	.081	.162	.081	.081	.081
High Density 91/523	18	C		.324	.162	.081	.162	.081	.081	.081
Low Density 91/294	28	D		.324	.162	.081	.162	.081	.081	.081
Control 1 88/105	14	E		.324	.162**	.081	.162	.081	.081	.081
Control 2 88/102	6	F			.162					.081

* There are no 100 spha final stocking treatments on the South Island sites

** There is no 2E treatment on the North Island sites.

TRIAL DESCRIPTION SHEET

FOREST OWNER: Wenita Forestry Ltd

EXPT. NO.: FR172/6

FOREST: Otago Coast

CPT.: 11/03

CONTROLLING AGENCY: FRI-Genetics and Tree Improvement

WORK PLAN #: 2151

PROJECT: GTI 29/14 FRI CORR, File:

PURPOSE: To compare performance of special purpose breeds across regions.

SITE DETAILS:

ALTITUDE: 140m

ASPECT:

SLOPE: 0 - 15°

GROUND PREPARATION: Windrowing of slash

PREVIOUS USE: Forest plantation

EXPERIMENT DETAILS:

SPECIES: *P. radiata*

STOCK: 1/0

DATE PLANTED: 16/07/92

OF PLOTS:

SIZE OF PLOTS: 36 x 45m

SPACING:

PLOT AREA:

TOTAL AREA:

DEMARICATION: Numbered posts

EXPERIMENTAL DESIGN:

Unbalanced split-split block

PROPOSED TREATMENT:

PROSED YEARS OF ASSESSMENT:

PERMANENCY: 30 Years

ATTACHMENTS:

Site Map

Trial Map

Code/Treatment Table

ESTABLISHMENT DATA

Trial No.: FR172/6

Contact Person: Wayne Lyndsay

Forest Owner: Wenita Forestry Ltd

Forest and Compartment: Otago Coast, Allantion Block, Cpt. 11/03

Stock type of surrounding Compartment: *P. radiata*

Seedlot # of surrounding compartment: 563/752

Latitude/ Longitude: S. Lat. 947

E. Long. 658, Nrms 260 I45

Altitude: 140 m

Soil type: Kah (Kaitangata Hill soils)

Site preparation: Windrowing of Slash

Weeds: Nil, sprayed Escort/Roundup, 50gms/6 litres/ha

Regeneration:

Slope and aspect: 0-10°

Make-up of planting gang: 9 Contractors

Dates planted: 16/07/92

Date seedlings lifted: 13/07/92

Previous land-use: Forest plantation

Previous stock type if forest: *P. radiata*

Seedlot number: 563/752

Comments:

Register of Field Experiments

EXPT:

SUB EXPT.:

SUB EXPT.: 6

Forest	Compartment	P/year	Total Area (ha.)
OTAGO COAST	11.03	1992	3.07
Landowner Wairua Forestry Ltd.			.
			.
			.

Purpose: (100 characters maximum)

TO COMPARE PERFORMANCE OF SPECIAL PURPOSE SEEDLOTS ACROSS REGIONS

Species Codes:

P	.	R	A	D

Keywords: (up to 6 words or phrases of 35 characters)

SPECIAL PURPOSE BREEDS
FINAL CROP STOCKING
HIGHLY MULTINODAL BREED
LONG INTERNODE BREED
HIGH WOOD DENSITY BREED
LOW WOOD DENSITY BREED

Experiment Start yr.	Current Plots	Plots Terminated	Control Agency	FRI related Projects	FRI WP/no.
1992	1		FRI		2151

Related Programs

[illegible]

Contact Officer:

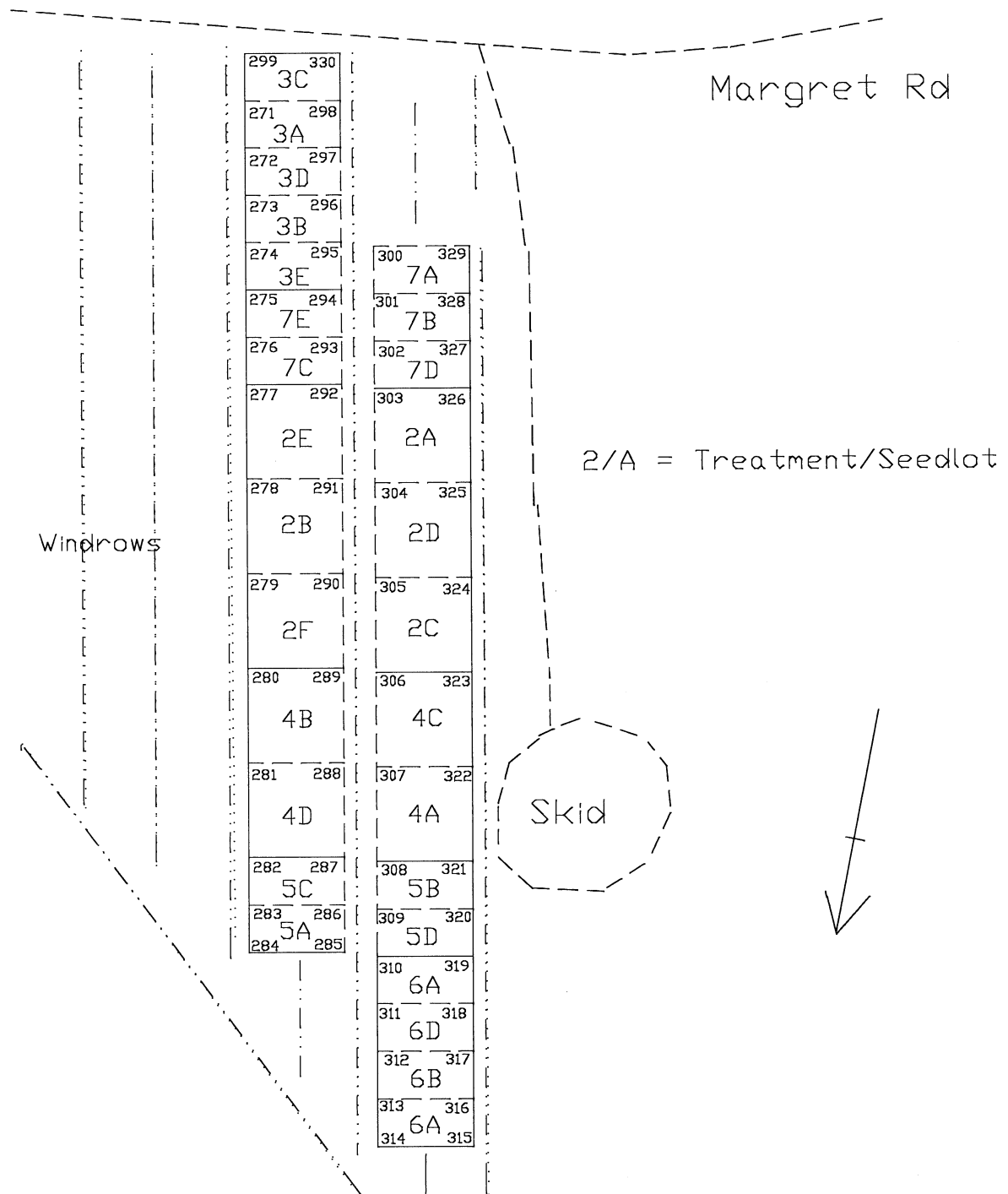
[illegible]

1992 Special Purpose Breeds Performance Trial.

Wenita Forestry Ltd Otago Coast Forest

FR 172/6

WP 2151

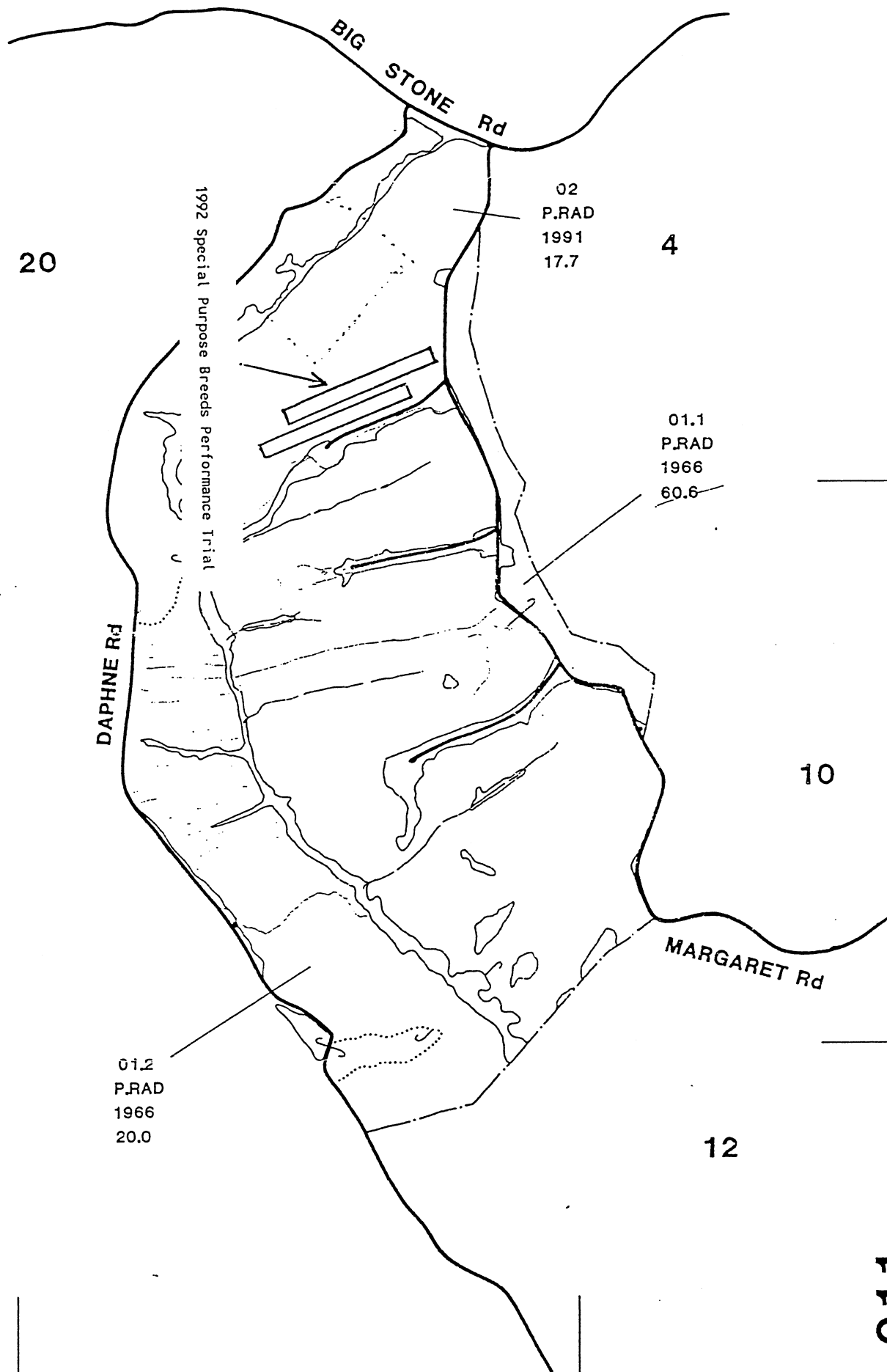


July 1992

OTCO 011

OTAGO COAST

502 A



011

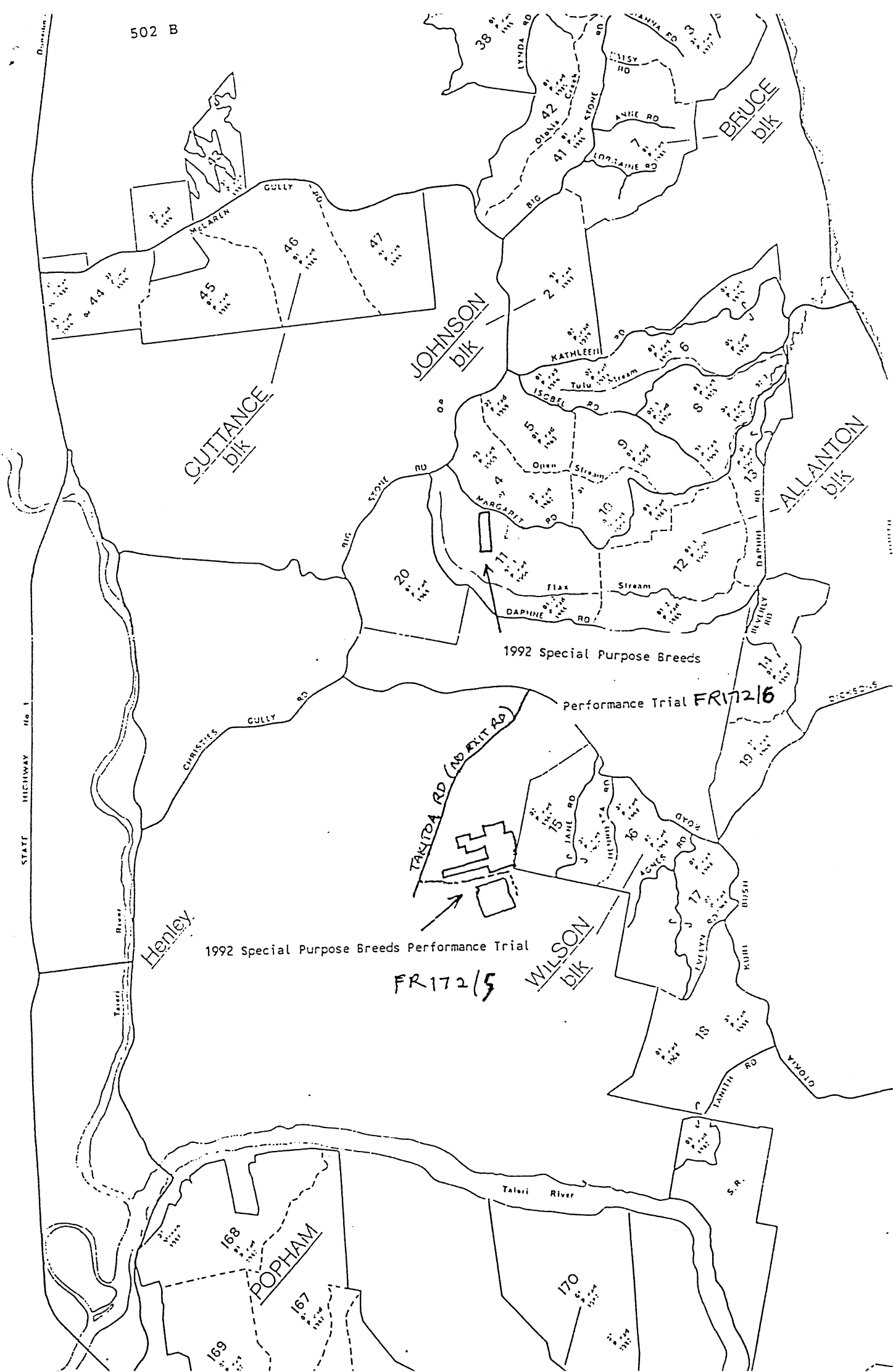


Table 1:

Breed and Collection No.	GF	CODE	TREATMENTS							
			PRUNED				UNPRUNED			
				1	2	3	4	5	6	7
			Final Stocking	100*	200	400	200	400	600	1000
			Initial Stocking	250	500	1000	500	1000	1000	1000
			Initial Spacing (m)	5 x 8	5 x 4	5 x 2	5 x 4	5 x 2	5 x 2	5 x 2
Multinodal 91/297 and 91/296 mix	27	A	Outer Plot Size (ha)							
				.324	.162	.081	.162	.081	.081	0.81
Uninodal 89/15/2	LI25(13)	B		.324	.162	.081	.162	.081	.081	.081
High Density 91/523	18	C		.324	.162	.081	.162	.081	.081	.081
Low Density 91/294	28	D		.324	.162	.081	.162	.081	.081	.081
Control 1 88/105	14	E		.324	.162**	.081	.162	.081	.081	.081
Control 2 88/102	6	F			.162					.081

* There are no 100 spha final stocking treatments on the South Island sites

** There is no 2E treatment on the North Island sites.