

and subscribe facts and ideas, better working plans can be made in future.

A disservice to forestry, rather than a service, may easily result from having an unduly long first cutting cycle, or in other words, by having large areas of virgin forest unworked.

HAVE SOIL, NO GRAVEL

by P. N. Hewett

This year's remeasurement of two pine plots in Greystones Compartment 3, Mundaring, has produced a new set of Mean Annual Increment and Current Annual Increment figures.

The plots must be the oldest established in *Pinus radiata* in this State, since trees are now 37 years of age and plots were established at 7 years and remeasured at fairly regular intervals thereafter.

The Site

Plots are on an old vineyard area which had several years of cultivation before plantation establishment. Plot No. 5, site quality I, is on a deep, moist basic soil - Byfield's loam, while Plot No. 3, site quality IV, is on a shallow phase - Byfield's loam with light gravel overlays.

Measurements

Plot No. 5 : Figures in April, 1959, indicate that both M.A.I. and C.A.I. have passed their peak and C.A.I. is rapidly decreasing.

M.A.I. 463 cub. ft. volume removed 9209 cub. ft.
per acre

C.A.I. 397 cub. ft. volume remaining 9742 cub. ft.
per acre

Total volume produced - 18,951 cub. ft.

No. of stems remaining - 64 per acre

Plot No. 3 : 1959 measurement also shows M.A.I. and C.A.I. decreasing, but at a slower rate than for site quality I (Plot No. 5).

M.A.I. 369 cub. ft. volume removed 6024 cub. ft.
per acre

C.A.I. 247 cub. ft. volume remaining 7620 cub. ft.
per acre

Total volume produced - 13,644 cub. ft.

No. of stems remaining - 80 per acre

Increment Curves

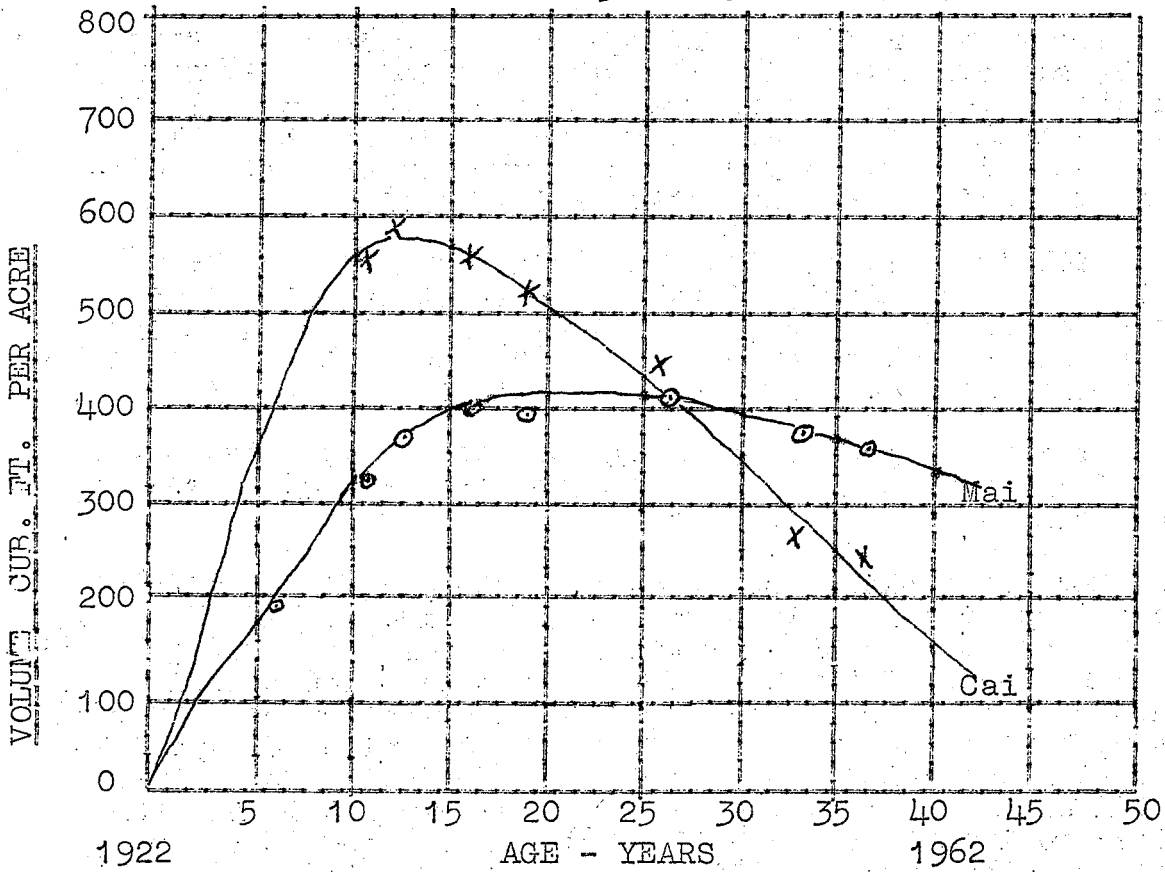
Graphs were prepared plotting age against C.A.I. and M.A.I. for each plot and the resultant curves conform very closely to the test book concept of increment curves. This is shown markedly in the case of site quality IV suggesting perhaps that

site quality IV has normal growth relationships, while site quality I may be considered as extra-ordinary.

Theoretical Rotation Age

It will be seen from the graphs that M.A.I. and C.A.I. curves intersect at 26 years for site quality I and 30 years for site quality IV. This would again suggest normal development in the lower site quality and supra-normal development in site quality I.

PLOT NO. 3. S.Q. IV.



PLOT NO. 5. S.Q. I.

