

C. Jones
16/12/98
10/12/98

DIARY OF W L MASON - 9 AND 10 DECEMBER 1998
Experiments in Wales with C Jones (TSU, Talybont)

Brechfa 15/81 (species garden) with CJ

My first visit for about 5 years. The main reason was to follow up interest in the plots sparked by the recent article in the QJF and the proposal that a local region of the RFS would visit the area in 1999.

We saw most of the retained plots despite having to dodge the Renault rally team who were practising on the road running through the plots. The most impressive plots are those of *Sequoia sempervirens*, *Pinus strobus* and *Pinus peuce*. The steepness of the ground makes access within the plots difficult and some of the paths have become overgrown. Thinning is due in a number of plots. The mensuration sample plots are due for assessment this winter and we agreed that there would be sense in putting all plots that are retained on a similar schedule. We agreed:

1. Reassess all retained plots this winter and thereafter on a 5 year cycle.
2. Label and retally all retained plots. ^{4 samples} 1 MI put in for 99-2000.
3. Clean the rides through the forest garden. ^{what?}
4. Remap the area showing new roads and rides - this map would be an essential guide for visitors. ^{4 x MI.}
5. Mark the retained broadleaved plots for thinning before next summer and the conifers for as soon as convenient thereafter. <sup>6 J
2 MI.</sup>
6. The preferred route for the visit would be to start on the southern side viewing the *Sequoia*, *Sequoiadendron* and WH plots, then turning the hill to view a suite of *Abies* plots and the *Pinus strobus*, go down through the *Pinus peuce* to the road (a plot needs to be installed in the LP here), and return along the road viewing a range of broadleaves on both sides. This route needs to be carefully checked for feasibility.

Action: Talybont

The medium to long-term future of this collection is still unclear. There is still no signed access within the garden and greater public involvement is probably essential to justify further inputs. There are failed plots which could be replanted (e.g. with native species) but it is difficult to justify such investment at present. We saw a number of plots with undergrowth of what I took to be laurel and this could become a severe control problem. It should be removed from any of the retained plots.

W L Mason
10 December 1998

Glasfynydd - General (potential RSA) with C Jones, B Jones (TSU, Talybont)

We visited compartments 4031 and 4032 (c. 25 ha of p50's SS) which had been identified as a potential regeneration study area (RSA) under the Silvicultural Systems programme (854). These stands are located on slightly sloping soils close to the Usk reservoir - estimated GYC is 18 and WHC 3. There is a history of line thinning for pulpwood. The lithology is Old Red Sandstone and soils vary from upland brown earths to loamy surface water gleys. Most of the soils appear to have some stone content and to have reasonable drainage. ESC categories would be fresh for soil moisture and medium for nutrition.

I concur with Colin Edwards' view that these are the best SS RSA's we have seen. There is regeneration on the edge of the compartments, but very limited evidence within them, suggesting that the light regime (guesstimated at 10-15% RLI) is insufficient to allow regeneration to become established. My only concerns are the fertility of the site which means that overthinning could lose the regeneration niche to vegetation and the possible susceptibility to windthrow. However, the uniformity of the stands, their size, and convenience to Talybont, mean that we should use these compartments if at all possible. We agreed the following action points:

1. Inform Forest District of our interest. ASAP.
Action: Talybont
2. Define buffers required between 1 ha plots. ASAP.
Action: CE
3. Locate as many 1 ha plots as possible within stands making allowance for buffers. By end February.
Action: Talybont
4. Visit and confirm plots by end March.
Action: CE
5. Take baseline plot measurements (including RLI) by end summer)
Action: Talybont/CE
6. Define treatments in light of 5.
Action: WLM/CE
7. Implement treatments during winter 99/00.
Action: Talybont

W L Mason
10 December 1998

Brecon 53 p95 (Ash/birch mixtures) with C Jones, B Jones

Third year assessments have been completed and survival of both species is high. The main need now is to ensure that the trees are established satisfactorily, especially the smaller Ash. This will require combined chemical and hand weeding over the next 12 months. There is gorse colonising some plots which will also need to be cut out and chemically treated (though not in the regeneration plots). Seedling conifers in the broadleaved plots (but not the regeneration plots) should also be cut out.

put
in 1999/2000

Action: Talybont

The regeneration plots (18 x 18 m) should be split into 4.5 m x 4.5 m squares and a number count and height assessed for all regenerated seedlings in these squares. This should be done in April/May next year. Vegetation will also need to be assessed next summer.

Action: Talybont

After this, next assessments will be as per plan at the end of year 6. It is a pleasure to see this experiment on the way to establishment.

W L Mason
10 December 1998.

Radnor 35/65 (Underplanting of JL) with C Jones

This experiment was closed in 1992, but apart from limited thinning has been largely untouched. It was one of a series where JL pole stage stands were thinned to 5 densities (0-500 stems ha⁻¹) and underplanted with a range of conifers (WH, GF, NS, SS, DF, RC, *Ab. alba*, JL) in a design with 3 replicates. Some light intensity measurements were made in the early years.

It was last assessed in 1976 and the most striking feature is the clear fall off in growth (and survival) of SS as the overstorey increases. This is affected more than any other species apart from JL - even DF, despite some abysmal form, appears more tolerant of overhead shade.

My main motive for looking at the experiment was to see if it could be amenable for some stand transformation studies. However, the original design which is a split-plot with density as main treatment and species as subplot makes it difficult to see how this might be achieved. I agreed to discuss this point further with our statisticians.

Action: WLM

However, we thought that measurement of all plots might make an interesting project for a student and I would raise this with SAFS, Bangor.

Action: WLM

In the meantime, CJ would discuss the possibility of thinning these plots with the FD. Because of the steepness of the ground, thinning would have to be based on systematic racks with one through each main plot buffer and 3 through the main plots at about 15 m intervals.

Action: Talybont

W L Mason
10 December 1998

Distribution:	WLM Diary file	1
	Experiment files	1
	C Jones	1
	N Day, Alice Holt	1
	C Edwards	1
	Spare	<u>1</u>
	Total	<u>6</u>