# PROBLEMS A WOODLAND OWNER ENCOUNTERS WHEN PLANTING COTTONWOOD

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(This interesting paper was presented by Dr. Stephens at the Western Meeting. Following the meeting, correspondence with Dr. Stephens indicated that the content of his paper prohibited publication. This decision was relayed to us with regrets).

## DISCUSSION TO: Mason Cloud and Earl Stephens

Q. Why the 15-foot spacing? And why not grow another crop between rows?

A. (Stephens) We can probably benefit by growing economic crops in our plantations. It would not only help pay for this, but, help on the weed problem, and enhance the site. The spacing is personal preference, but I think the growth rates experienced so far in the Po River Valley and various other places in Europe indicate that a spacing in the order of 12 to 16 feet for the kind of material we want to grow is perhaps better than something like 10 x 10, or

# COMMENTS by Mr. Smith:

8 x 8.

The work I've seen by Dr. Boyce indicated that the close spacing produced a better height growth, and that was using a single clone.

# COMMENTS by Mr. Morris:

In one of my study plots with Thimet, which is not a practical study, we planted 10 feet rows and 40 inches apart in the rows for the purpose of the study. At the end of 4 years we had scattered trees that would run 26 feet of clean trunk to a 4-inch top. We cut 6 pulpwood bolts and thinned this out to a 10 x 10-foot spacing from this 40-inch spacing. We had growing on the plot an equivalent of 12-1/2 cords per acre at 4 years. We cut off 5 cords and left 7-1/2 cords in our 10 x 10 spacing to go ahead and grow. We remeasured this last year and it averaged between 6 and 7 inches diameter and about 45 feet in height. The largest tree was 10.2 inches d.b.h., and 55 feet tall in 5 years. We know, at least, the potential is there; the next thing is to know how to get it to grow.

Q. Have you ever tried wilding cottonwood seedlings? (No answer)

#### COMMENTS by Mr. Meines:

During the shelterbelt days we used to gather them that way along the river. Pull them up on the sand bars and shipped them by the carload.

- Q. What species of cottonwood are you growing?
- A. (McNeel and Stephens) Deltoides. Although it seems like we've got at least 5 varieties in our nursery.

### COMMENTS by Mr. Morris:

The study I mentioned, the first year they ranged anywhere from 5-1/2 to 15 feet tall and that was run-of-the-bar stuff. The third year we took progeny that averaged about 11 feet tall in the nursery and made them into cuttings and the variation in total height was less than 3 feet. The majority of them fell within a 1-foot range in height. So there is an important factor there.