## Prairie Farm Rehabilitation Act

expensive for the rest of us. We always have the question as to who will pay the cost of conservation. We can get general agreement that conservation is good for this and future generations, but when it comes to who will lay out the money or who will put up with the problems that accrue when you try to conserve natural resources, that is something we have not be able to address properly. In part, that is because of the split jurisdiction. There are other problems, some of which I will allude to.

As an example, I will take my own area. Most of us are most comfortable talking about our own area. Where I live in Saskatchewan, the land was originally covered by fairly heavy forests, poplar and spruce. Underneath the good forest was some very good farm land. Otherwise, it would not have produced good forest. For three generations, farmers in my corner of the country have considered themselves successful if at the end of the year they could say they have cleared so many acres. We fought the forest, got rid of it and have now turned it into farm land. That is considered a measure of success.

We have reached the point now where most of the farm land is clear. A lot of fencelines were left, growing up into tall trees, which slowed down the winds both in summer and winter and provided habitat for some of the smaller wildlife, including deer. As farmers began to use larger and larger equipment and were pressed economically, they began to look at those fencelines as if they were enemies rather than friends.

The farmers began to pull out the fencelines. It does not cost much to knock down a mile or a mile and a half of fenceline. They found that they could get on their fields two or three days earlier than their neighbours who had left the fencelines up. They had no birds and no wildlife. However, they were a couple of days earlier and they avoided the frost. It did not take long for the neighbours to see that the "successful farmer" did not keep tree lines. So my part of the country, which was once verdant with trees, is now laid bare, and you can see a distance of five or six miles just as though you were on the Prairies. Of course, the winds blow through and the snow does not stop in the middle of the fields and we are having attendant problems with water in the spring. The snow melts very quickly, creating erosion as it goes. Some farmers consider that erosion helpful because it clears out the water courses and allows the water to escape even more quickly so that they can get their crop in a few days earlier. But in the longer term the next generation in that part of the country may find themselves faced with a shortage of water. We know from experience on the Prairies during the 1930s that once you dry out the land too much, the rains stop coming. We may be having some influence on the weather patterns in that part of the world. In the long term it may be a very costly exercise of these very efficient farmers to have made the best economic use of their resources.

## • (1740)

We know from observing monoculture, not only in our region but in other regions, that the results can be quite

hazardous in a period of only 10 or 15 years. Sometimes it takes as long as one or two generations, but the result is always quite visible. I know from having visited the single-crop potato area of New Brunswick that erosion is a much larger problem there than it is even on the Prairies. The water courses wash great gouges in the soil each spring. They are filled in, planted over, no fibre is put back into the soil and the process continues again the next year. We have no way of saying to farmers that these water courses should be seeded with grass to hold them in place. We have no agency which could point out the advantages of keeping trees as part of the ecology of our farm areas. We have no one selling the advantages of trees except for some people who are now getting old, having started out back in the thirties. They did a good job of explaining why we needed tree-lines and trees on the Prairies, but the message did not sink in, not in those areas where there were trees to begin with, and we now seem to be doomed to making the errors that our prairie farmers made.

In his motion, the Hon. Member for Wetaskiwin has set out to have the new farm and forest rehabilitation agency co-ordinate national action with respect to both wet and dry-land management. He wants new technology placed in the hands of individual farmers and foresters, and I think some environmentalists and wildlife managers as well. Along with that—and perhaps this agency is the one to do it—there has to be an organization to do genuinely innovative research, an organization that would investigate quite new ideas, some which might be considered to be whacky, but which might have an impact on the over-all environment.

To give you one example of that, Mr. Speaker, most Members of the House will realize that there is a big salinity problem in a lot of prairie soils. We do not have anyone who has done anything more than just determine that if you keep plants growing on those saline spots, the problem gets somewhat better. Farmers have noticed that if you just abandon those areas in some parts of the Prairies to the kochia weed, gradually the area seems to shrink in size and again become available for agricultural production. The suspicion is that this weed may have some ability to reduce the amount of salt in those areas, but there is no one doing research to identify that.

I know, for instance, that there has been research in similar areas which has arrived at surprising results. The National Research Council had a research centre in Saskatchewan some six or eight years ago, when I was on the Science Council of that province, that had done some research with cattails and bullrushes. They found that those particular shallow-water plants had the uncanny ability to take heavy metals out of sewage and sludge, both in the water and in the soil, and seemingly get rid of it from the environment. At the same time, they produced a plant which was usable for livestock feed. I think that that researcher should be tracked down and he should do some similar work on the kochia weed, which seem to be able to absorb some salt from the saline spots which are a growing problem on prairie soils.

Another proposal is to have a research unit do truly innovative research which our plant breeders and agriculturalists