

# Oak Clearcutting: To Cut or Not to Cut? A Debate Case

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## The Problem

Twenty acres of 150-year-old white oaks might be cleared. All are prime lumber trees, but half of the 260 trees are on a south-facing 45-degree slope. One of the trees in the group is the fourth largest-diameter tree in the state. Another site of 25 acres on the other side of the valley with a different landowner was clearcut. Erosion and the loss of under-story plants and shrubs have permanently changed that site.

## The Roles

*Jerry and his wife Susan* — Landowners of the white oak site

*Don and his assistant Jay* — Sharpshooter deer control specialists

*Dale and Mark* — Local tree farm owners who have successfully raised many different tree species

*Jake and his assistant Bill* — Loggers / forest products specialists

*Pam and her assistant Steve* — State foresters

*Bill and his assistant Ron* — State soil conservation specialists

The different sides of the debate are represented by the following people:

- *The Landowners* — They sit together and, after making their opening statement, listen to the other five groups of people, who try to convince them of the best forest management practice to use.
- *Deer Sharpshooters versus Tree Farm Owners* — These two groups have different agendas and have differing opinions about the option that is best for the landowners (see below for more details).
- *Loggers versus State Foresters and Soil Conservation People* — These two groups also have differing opinions of the best management practice for the site. Loggers have a short-term view of a healthy forest. Foresters and soil conservation people have a long-term view of a healthy forest (see below).

## Resource / Background Information

### *Landowners*

As the landowners of the site, you are looking for the best option for the oak trees on your property. You haven't made the decision to cut yet. You need to be ready to answer questions about what you want to do with your trees, and about your plans or goals for the future for this land. At the end of the debate, after listening to each of the parties, you will state your decision—**YEA** or **NAY** to clearcut. If yes, you need to be able to tell the group why you have decided that clearcutting is the best option. You should have logical reasons, like you need the money, this is only 1/5 of all the oak trees on your property, the price of lumber is high right now, or you want to bring back another healthy forest eventually. If you decide not to clearcut, what other option did you choose and why? You can ask each of the other participants in the debate to clarify their statements, give examples, or state estimated costs of their services.

## Resources

Department of Natural Resource Ecology and Management, Forestry Extension, Iowa State University:  
<http://www.forestry.iastate.edu/ext/ext.html>

### *Deer Sharpshooters / Population Control Specialists*

You are experienced in reducing deer numbers in urban and rural areas by several techniques. The land in question has a current density of 50 deer per square mile. What is a manageable deer density? How can this density be reduced effectively and how long will it take? Are the landowners able to sell the meat for cash? Is the meat the property of the landowner? What is the effectiveness and cost of deer-proof fencing? You are really glorified hunters. You like your job because you can hunt deer all year round! You enjoy deer-hunting but do not want to wipe them out. You want to limit their numbers first, to keep some around for hunting, but secondarily, to reduce vegetation damage when populations get high.

## Resources

Google search terms:

Iowa deer management; City of Iowa deer management plan

### *Tree Farm Owners*

Are there species of trees that deer do not eat? How can young oaks be protected? Can some trees be grown until they are taller than deer height and then transplanted? How long will this take? What should be planted on a 45-degree, south-facing slope to start a “healthy forest”? Tree farmers hate deer. Deer kill trees by destroying the bark by rubbing their antlers against the trees. They eat everything, especially the new buds that ensure new growth for next year. They create ugly browse lines on vegetation in areas with there are high populations. Tree farm people want to get rid of all deer and are very proud of the varieties of trees and shrubs that they can offer that deer do not eat. They also have some ingenious fencing techniques that no deer has ever gotten over or around or through.

## Resources

Iowa Tree Farm Committee, Tree Farming in Iowa:

<http://www.forestry.iastate.edu/ext/pubs/ITFC.pdf>

Iowa Department of Natural Resources, Forestry, Caring for Iowa’s Forests and Prairies:

<http://www.iowadnr.com/forestry/index.html>

Google search terms:

Iowa tree farms

### *Soil Conservation Service Specialists*

You need to suggest ways that erosion can be reduced after a clearcut or during the process; you need to know how much less erosion would occur if it was not clearcut and what kind of soil is needed for a healthy forest. South-facing slopes are on average 12°F warmer than north-facing slopes, which is an advantage to a clearcut slope that is trying to get oaks to regenerate. But the problem is it’s a 45-degree slope—you need to recommend the best use of this slope from your past training and experiences. Maybe try to find examples of case studies or pictures of how clearcuts have ruined salmon streams in the Northwestern U.S., keeping in mind that you work closely with Iowa Department of Natural Resources water resources people to help maintain the best water quality possible. Like the foresters, you are equally perturbed about the erosion problems caused by past clearcuts.

## Resources

Johnson, Dale. Nov. 2003. Soil conservation cost-share 30 years old; Iowa's best kept secret:

[http://www.agandenvironment.com/news/news\\_20031115.htm](http://www.agandenvironment.com/news/news_20031115.htm)

Natural Resources Conservation Services, Farm Examples:

<http://www.ia.nrcs.usda.gov/features/HelpAHabitat/do-farm.html>

## Loggers / Forest Product Specialists

You need to find the current price of oak lumber trees in board feet. You should be familiar with other forestry harvesting techniques, but be prepared to argue that clearcutting is the best method for several reasons. Also you need to bring in how your job depends on this kind of work, that you are experienced and realize the importance of replacing/replanting trees after they are harvested since they really are a renewable resource. You should be able to defend your harvest practices when questioned about injuring forests, compacting the soil and other dangers/consequences of clearcuts. It's your job to cut trees, haul them away quickly, sell them, and make money. You say you are aware of the soil compacting problem from your large equipment and the damage to other trees and plants when you work in an area. But you say that forests are resilient. They grow back. They are a true renewable resource. You can give reasons why a forest is better after you harvest its trees, whether through clearcutting or some other selective harvesting technique. You think state foresters have too many rules to follow and only see forests in the long-term not in the short-term.

## Resources

Iowa State University, Iowa Industries of the Future, Forest Products:

<http://www.ciras.iastate.edu/IOF/forestproducts.html>

Primary Forest Products Industry and Timber Use, Iowa, 1980:

<http://www.treesearch.fs.fed.us/pubs/viewpub.jsp?index=10358>

Google search terms:

forest products; timber harvesting methods

## State Foresters

You need to try to present data and facts that (1) will help the landowners go through with a clearcut to reestablish an oak forest and show them how to do it. For oak regeneration to occur and acorns to germinate, the ground must receive open sunlight. The other option (2) will give the landowners several good alternatives to clearcutting and maintaining a healthy forest. You need to ask them questions about what their goals are for their forest land and help them to understand the best management practice. You have seen the scars and slow recovery of a clearcut forest. You know of other harvest methods that will reduce soil and plant damage. You must talk adamantly about the problems and dark history of local clearcuts. You represent the long-term view of a healthy forest, and only specific logging techniques fit into your long-term views.

## Resources

Tree Farming in Iowa:

<http://www.forestry.iastate.edu/ext/pubs/ITFC.pdf>

The Iowa Department of Natural Resources:

<http://www.iowadnr.com/forestry>

Image Credit: A white oak (*Quercus alba*) in a stand of montane oak-hickory forest on The Nature Conservancy's Warm Springs Mountain preserve, Bath County, Virginia. Photo: Gary P. Fleming, courtesy of Department of Conservation and Recreation.

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