

## MINUTES

### MONTANA SENATE 52nd LEGISLATURE - REGULAR SESSION

#### COMMITTEE ON NATURAL RESOURCES

**Call to Order:** By Chairman Larry Stimatz, on April 19, 1991, at 1:05 p.m. The roll was called by the secretary.

#### ROLL CALL

**Members Present:**

Lawrence Stimatz, Chairman (D)  
Cecil Weeding, Vice Chairman (D)  
John Jr. Anderson (R)  
Esther Bengtson (D)  
Don Bianchi (D)  
Steve Doherty (D)  
Lorents Grosfield (R)  
Bob Hockett (D)  
Thomas Keating (R)  
John Jr. Kennedy (D)  
Larry Tveit (R)

**Members Excused:** none

**Staff Present:** Gail Kuntz (EQC).

**Please Note:** These are summary minutes. Testimony and discussion are paraphrased and condensed.

**Announcements/Discussion:** none

#### HEARING ON HJR-45

**Presentation and Opening Statement by Sponsor:** Representative Mark O'Keefe, District #45, was unexpectedly called away from the Capitol. Senator Steve Doherty, District #20, introduced HJR-45 as a co-sponsor. Senator Doherty said that the title explained HJR-45, and he was not aware of the specifics of the energy policy which prompted the resolution. Apparently there is something in the proposed Federal Energy Policy that would authorize the use of Montana water to transport coal by means of slurry pipelines. Montana has heard this talked about for many years. HJR-45 states that until Montana completes its water adjudication process the state will oppose a Federal Energy Policy that would authorize the right of eminent domain for coal slurry pipelines that would use Montana water. This is reasonable given the draw downs on the Fort Peck Reservoir, and the problems that were discussed yesterday about the Yellowstone

Basin. Yellowstone Basin has not had that much water for many years, and historically, the Powder River Basin has never had much water. Until the water rights are quantified was a resolution in response to proposed Legislation in Congress about using Montana water to slurry coal. The resolution merely states that the Montana Legislature is opposed to any legislation by Congress that would take Montana water by federal eminent domain until after the state of Montana has completed Water Adjudication on the state's water. The Yellowstone Basin problems were discussed by this committee with regard to the Cheyenne Water Treaty Bill, and this resolution identifies that until the state has determined the water rights then the Montana Legislature opposes any Congressional legislation that would take Montana water for coal slurry pipelines.

Proponents' Testimony: James T. Malar, Chairman, Montana Joint Rail Labor Legislative Council, and also representing the Transportation Communication Committee, gave background information about the constant attempts by the downstream states, particularly the southwest and U.S. Representative Mo Udall, that puts in the perennial "coal slurry" legislation. This legislation would require the states of the upper Missouri River Basin to relinquish water to eminent domain process. There is a pipeline conglomerate that is called ETSI that advocates this idea. Each session of Congress has seen the same legislation. This legislation would reduce the jobs for rail workers in Montana on unit trains. The state of Montana does not have the water either. There is a lake drop of water in the Fort Peck Reservoir, and Garrison and other reservoirs are in the same shape. HJR-45 is a glorified letter addressed to the Montana Congressional Delegation stating that we oppose this legislation. In the last session of Congress, Representative Marlenee voted for the coal slurry legislation in the Interior Committee. This resolution reflects our feelings in Montana about using Montana water to transport dirty coal.

Opponents' Testimony: Ted Doney, Attorney, Helena, said he handles water law and his not really a strong opponent of this resolution. He felt that there is a false premise used to justify this resolution, and it is the Great Water Adjudication Myth. The misconception is that the state of Montana needs to adjudicate all its water rights to determine who much water is available. This is incorrect. Adjudication only determines water rights, and these rights do not mean that the water is being used. Water rights can not be used to determine how much water is available. Every stream in Montana has water rights that far exceed the flow by 3 to 4 times. If Montana water rights are added up and then subtracted from the stream flow there will never be any water available to appropriate. The correct way to calculate what amount of water could be

appropriated is to add up water usage. This resolution states that until Montana adjudication is complete that no water should be appropriated. After adjudication the state will still not know how much water is used. Adjudication could take as long as 50+ years to complete. This resolution is redundant because last session HJR-29 did the same thing. But this is just a resolution, not law, so if the committee feels they need to send a letter, this will repeat the letter last session.

Questions From Committee Members:

Senator Bianchi asked Mr. Doney if there was some kind of statute that would states that water for coal slurry is not a beneficial use of Montana water? Mr. Doney said there was statute that stated that, but it is no longer in statute. In the early '80s there was a case out of Nebraska, Sportaze v Nebraska, which ruled that similar statute in that state was unconstitutional. The U.S. Supreme Court ruled that it was unconstitutional. Montana's statute was repealed, and replaced with a very strict set of criteria allowing coal slurry pipelines to take water from Montana. In order to move water out of Montana for coal slurry is very difficult to meet the criteria. It even requires legislative approval if there were a change of water rights involved.

Senator Bengtson asked Mr. Doney if this current statute allowed for emergency powers to the Governor? Mr. Doney said yes, and it states that coal slurry pipelines are legal. During the Schwinden administration a study began by the Water Policy Committee. The original creation of the Water Policy Committee was to study the coal slurry pipeline issue and to develop a new policy for Montana. Senator Bengtson asked if this HJR-45 could be in conflict with what is in law now? Mr. Doney said he felt it is in some degree although it is a resolution and not binding on the state of Montana or Congress, legally speaking. It is a strong letter to our Montana delegation. Senator Bengtson asked if there were ways to determine how much water is being used? Mr. Doney said there is legislation to enact measuring devices that passed this session, and it should be very helpful.

Senator Tveit asked Mr. Malar about his closing remark about dirty coal, and what did he mean by it? Mr. Malar said his father used to work in hard rock mining and he came home with gray dust on him. Coal miners come home black.

Senator Grosfield stated that coal slurry pipelines are very expensive to build, and would not be built without a good and constant source of water. The Water Compact Commission determined that there would still be 300,000 acre feet of water left in the Tongue River Dam after the Cheyenne were granted their water. Senator Grosfield asked Mr. Doney if this was the kind of water supply that would be used? Mr. Doney said he believed that was correct, and during the 1985 Legislature he

studied this in depth. It is true that a coal slurry pipeline would appropriate water from a firm, constant, guaranteed supply of water. A coal slurry line needs the water to keep the coal from solidifying in the pipeline. The water needs to be there at all times. This would be accomplished by going to the major reservoirs in Montana that have that supply of water available at all times. This would be reservoirs like Fort Peck with its 500,000 acre feet of water available right now. That amount could be argued because the level is down right now. The Yellowtail Reservoir has 300,000 acre feet available. The other source might be ground water from the Madison limestone formation. A slurry pipeline is not going to pull water straight out of streams, not even the Yellowstone River. It is not dependable enough. Senator Grosfield asked what amount of water is needed for a coal slurry pipeline? Mr. Doney said a minimum of water is about 15,000 acre feet per year, and this could be taken from Fort Peck and it would be unmeasurable to note the change. Some companies talk of up to 50,000 acre feet per year, and that would be about 1/2" measurable in the Yellowtail Reservoir, and it would be unmeasurable in Fort Peck.

Senator Tveit asked if the law about coal slurry water use in Montana stated that the water used had to be "stored water"? Mr. Doney said the law makes the company lease the water from the state of Montana, and that the water has to go through storage projects.

Senator Grosfield asked Mr. Doney is this went back to HB-680 which deals with the marketing of Montana water? Mr. Doney said that was correct, and the state of Montana would paid the agreed upon amount with the Department of Natural resources for this leased water. It could be a tremendous amount of money. This is the only way Montana water can be used for coal slurry pipelines under our Montana statutes.

Senator Weeding asked Mr. Doney if coal slurry pipelines were economical at this time? Mr. Doney said the pipelines are not in the picture right now, but in 1975 the economics of pipelines were right versus the cost of moving coal by railroad. Today, it is felt that coal slurry pipelines are not economical, and could not compete with the railroads. This has more to do with energy prices than anything else. If energy prices go up like in the last 70's, then the picture could change. The price of coal would go up. Senator Weeding asked if this would apply more to building a Western coal market where there are no rail beds to transport the coal? Mr. Doney said that was probably correct. There is coal being shipped west, and that was not the picture in the 70's.

Senator Weeding asked Mr. Malar would respond to the same question? Mr. Malar said the only pipeline would be the ETSI line that would go south to Texas that would take coal to compete with the imported coal that the Texas utilities have. The other line would go into Arizona and link with the Black Mesa Pipeline

which is in existence now. There is a short pipeline to Nevada, but he had no knowledge of any line planned to the west coast. It seems that pipelines are built parallel to oil or water pipelines. Coal trains run up and down this southern route. Senator Weeding asked if Mr. Malar perceived a threat to the rail industry by the development of a west coast market for coal? Would you have adequate rail to ship west? Mr. Malar said the studies by ETSI was for a proposed line to the west coast, but the mountains were restrictive. They would have also had to compete with the barge traffic on the Columbia River. The rail concern is that the law allows for eminent domain. Pipelines could go through the middle of your barn or house with just compensation. There are hazards involved if the line should break across good land. There have been breaks along the Black Mesa in Arizona, and it is very messy.

Senator Bengtson asked Mr. Malar if he thought HJR-45 would be in conflict with the law? Mr. Malar said he did not think it was in conflict. Water adjudication will take a long time, and there was legislation that addresses measuring water. There is a surplus in Fort Peck, but no one knows what a seven year drought period will do. Water is so precious out here, and the state is working for agricultural development. Some have suggested non-potable water like the Berkeley pit, and it has to be cleaned up before the water can be used for anything.

Senator Keating said his personal experience with the Madison aquifer is super charged with water, and a study stated that huge amounts of water withdrawal to bring this aquifer down. It could probably support 2 or 3 slurry lines and not be affected appreciably. He did not having any concern with the resolution stating ground water or service water rights that are subject to adjudication and of beneficial use. But the way the resolution is drafted it will presume that all water is subject to adjudication. He is familiar with several oil wells that have had too much water. He agreed that the state of Montana should not use adjudicated water rights, but Montana has a 2,000 year supply of coal to export. The jobs from mining, coal lines, etc. need to be considered. We do not want the rest of the country to think Montana doesn't want anything but a big natural park in this state.

Closing by Sponsor: Senator Doherty suggested that the resolution could be amended to cover Senator Keating's concerns that this resolution only cover "water subject to adjudication". This resolution is an answer to some of the goofy ideas people like U.S. Representative Mo Udall have about using Montana water. If the Federal Government wants to work with Montana water rights then find, but federal eminent domain should not be used until the state of Montana has a hold on the state water. In southeast Montana, water is scarce. Montana needs to send the message that are state water can be used, but the people will have to play by Montana rules. This letter tells our Montana delegations that is

how the folks at home feel.

EXECUTIVE ACTION ON HJR-45

Amendments, Discussion, and Votes: Senator Doherty moved to amend HJR-45 to cover water subject to adjudication.

Discussion: Senator Grosfield said he understood the amendment, but opposed it. The water adjudication could take 50 to 100 years to complete. All water for adjudication could be traced back to steams or wells that go to groundwater.

Senator Stimatz asked if putting in 20 years would help? Senator Bengtson said the adjudication is not what is needed. The state needs to measure water usage. This resolution sounds good for Montana, but it isn't. We are giving a mixed message about what Montana needs and priorities are.

Senator Grosfield agreed. Montana has a valuable asset in water, and there is a potential for a great deal of income in marketing the state's water.

Senator Doherty said if the state market's water from a federal reservoir then the state of Montana will not get any of that money. This resolution is about federal eminent domain and the taking of Montana water.

Senator Keating agreed with the amendment, and said nothing can still be done until adjudication is done.

Senator Hockett asked why this resolution needs to be done again, if there was already a letter sent from the last session? Senator Doherty said every time the Congress talks about taking Montana water that the Legislature should send a letter stating the Montana opinion to such ideas.

Senator Stimatz cautioned the committee that this was just a resolution, at a late date, and so the committee should not get hung up on changing the language. Senator Doherty agreed, and he withdrew his motion to amend.

Motion: Senator Grosfield moved to Do Not Concur in HJR-45. The motion was tied 5 to 5 until Senator Weeding returned. He voted against the motion.

Motion: Senator Doherty moved to Do Concur in HJR-45. The motion passed 6 to 5. Senator Doherty will carry HJR-45.

### HEARING ON HJR-43

Presentation and Opening Statement by Sponsor: Representative Mary Ellen Connelly, District 8, said she sponsored this bill on behalf of the timber industry whom she met with last fall. The industry members from Flathead County expressed a need for education through the university system. This resolution is one of many she introduced that dealt with the timber industry. The House Natural Resource Committee made amendments to the bill that the timber industry did not like. She proposed amendments that she hoped would be agreeable to the timber industry (Exhibit #1). She said the word "sustainable" did not have a definition, so this would reinsert the original language of the bill.

Proponents' Testimony: none

Opponents' Testimony: Don Allen, Montana Wood Products, apologized to Representative Connelly for changing side on this bill because he supported in the House. She had resisted the House Natural Resource Committee amendments. Mr. Allen said Montana Wood Products does not normally oppose legislation that would be a study of problems in the forest, but the idea of "sustainable" is being fought over in Washington. The debate over the language during the hearing concerned him about what could develop in Montana's forest industry. The industry is already following the BMP's and the Streamside Management Zone bill is going to be passed. His group and Montana Loggers Association moved ahead with some positive approaches by providing funding for another Forestry Extension officers. There is a Flathead Basin Commission, and a Montana Cumulative Water Shed Effects Cooperative in place. Both groups look at things involved with sustained yield and other cooperatives concerned with forest management. A recent federal study showed the Flathead, Lake, Lincoln and Sanders counties will have less timber available (Exhibit #2). The Flathead Economic Development Council told some of the problems that face the industry. The Montana Wood Products' because concern is that the Department of State Lands will not be able to conduct this study without sacrificing some of the things they are suppose to do under HB-678 passed last session. Also, HB-731 from this session, the department has more work with no additional money. The Department of State Lands needs to concentrate on implementing existing statutes. There was a pilot project to get more timber up for sale, but it was stated that there were not enough resources or money to do that. There is authorization to cut up to 50 million board feet per year, but the level is not even close. In view of the fact that HB-731 did not receive any funding, that this resolution

would possibly take attention away from the parameters set forth in HB-731. The real problem is that the forest service is not meeting its allowable sale quantities, and they only reached 52% last year. This and the soft market has been the real reason for mill closings. The available timber and what can be harvested is what is in the "Timber Supply Forecast". There are 142 appeals in the state of Montana's timber harvest, and these have tied up vast amounts of timber that should be harvested. There is no shortage of timber, but shortage of access to the timber. In HJR-43, Page 2, beginning on line 20, this will be done by HB-340. After 3 years it will change to a forestry tax. So cleaning up the language might help, but the Montana Wood Products would rather see the effort put into HB-731.

Keith Olson, Montana Logging Association, opposed HJR-43 by letter (Exhibit #3).

Questions From Committee Members:

Senator Keating asked Jeff Jahnke, Department of State Lands, what the department defines as "sustainable"? Mr. Jahnke said the definition of "sustained yield" is harvesting at a given rate that will provide a continuous and long range harvest. This amount of harvest would provide harvesting forever at a certain rate.

Senator Grosfield asked Mr. Jahnke is he felt that the wording should be "sustained yield" not "sustainable"? Mr. Jahnke said that "sustainable" was used in Washington in the "Sustainable Forestry Roundtable", and the definition is too broad and it includes more than timber. Senator Grosfield asked Mr. Jahnke to comment about Mr. Olson's letter and the remarks that the Department of State Lands needs money to do this? Mr. Jahnke said there is a misunderstanding as to what the department is doing currently as it relates to things described in HJR-43. The department is currently conducting part of a timber supply study that was a result of the last state-wide forest inventory. This study should provide the answers to the questions on Page 2, line 17 through 21, part a & b. The other three questions, Page 2, line 22 through Page 3, line 6, are not being studied. The department does not have the expertise, so the department would have to contract this out. If the department was to do HJR-43, get no fiscal support for it, then the money would have to come from some other program.

Senator Keating asked Mr. Allen if in light of what State Lands said about doing a & b, does the Flathead Economic group get into these 3 other questions? Mr. Allen said there is an on going study with evaluations and hearings according to Exhibit #2. It has become a community focus. It used the article to point out that there are already these groups looking at these questions. So a study to determine answers would be a repeat of these groups' efforts. State Lands is not geared up to conduct the study. Senator Keating asked Mr. Allen to suppose the study

could be done, then how would the information be helpful? Mr. Allen said he felt that this resolution's study does not address the real problem the forest industry has, and that is timber availability.

Senator Hockett asked Mr. Allen why timber harvesting causes piles of poles that are burned? Mr. Allen said this is a real concern. The Montana Wood Products are governed by the hazard slash act rules that state these piles need to be burned. MWP has asked for a meeting with State Lands, Water Quality, and Air Quality after the session to discuss this very issue. This state burns more than other states, and MWP does not feel that this much needs to be burned. People on the post and pole side of the industry are anxious to have more access to these piles of slash. This will be looked into without a study.

Senator Hockett asked Mr. Jahnke if this would be something that State Lands would continue to do regardless of this bill? Mr. Jahnke said the department has talked with Mr. Allen about this problem. These piles create an air quality problem with the requirements for burning, and also silvacultural problems. All these concerns come together to cause these piles to burn with the wood product in them. All interested groups need to talk about how these piles can be better utilized. He agreed with Mr. Allen.

Senator Grosfield stated that he has been involved with people in the pole operation side, and they do not want to deal with slash piles. There is too much junk in there, and saw blades take a beating.

Closing by Sponsor: Representative Connelly closed by stating that suddenly no one is supporting her resolution. She had talked with Mr. Casey earlier, and with her proposed amendments she felt this resolution could be continued. She did admit that it might cost more than originally suggested. This is an issue that should not be dropped.

#### EXECUTIVE ACTION ON HJR-43

Discussion: Senator Tveit said that there appears to be some real good questions that need to be answered in HJR-43.

Senator Keating added that he had talked with State Lands, and the department is just too busy to handle this, but the department is already doing part of what this resolution calls for. If the Legislature interferes with what State Lands is currently doing then the whole process becomes inefficient. There is no money forthcoming, and there is only so much the

staff can be expected to handle efficiently. The fiscal note states that the money will come from the general fund. Senator Keating sympathized with Representative Connelly, but at this time this just isn't affordable.

Senator Hockett asked if there had been a bill to fund an additional Extension Forester? Mr. Jahnke answered that HB-906 did provide for an Extension Forester, but that job requirements for that position is one of education. This position would work with the industry people to help educate them on the BMP's and how to best attain sustained yield.

Senator Tveit stated that HB-340 called for a study by the University of Montana of imagery, etc., so this resolution would repeat some of the areas that HB-340 called for.

Senator Hockett asked if the U.S. Forest Service is doing imaging? Mr. Allen said there is some type of technology being used, but it is providing information to determine productivity. The end purpose of that information is different that the information called for in HB-340 or HJR-43.

**Motion:** Senator Tveit moved to Table HJR-45. The motion passed unanimously.

#### ADJOURNMENT

Adjournment At: 2:30 p.m.

  
LARRY STIMATZ, Chairman

  
JOYCE INCHAUSPE-CORSON, Secretary

LS/jic

ROLL CALL  
Natural Resources  
COMMITTEE

DATE 4-19-91

52

LEGISLATIVE SESSION

NAME	PRESENT	ABSENT	EXCUSED
Senator Anderson	X		
Senator Bengtson	X		
Senator Bianchi	X		
Senator Doherty	X		
Senator Grosfield	X		
Senator Hockett	X		
Senator Keating	X		
Senator Kennedy	X		
Senator Tveit	X		
Vice Chairman, Weeding	X		
Chairman Stimatz	X		

Each day attach to minutes.

Amendments to House Joint Resolution No. 43  
Third Reading Copy

Requested by Rep. Mary Ellen Connelly

Prepared by Susan Fox  
April 17, 1991

SENATE NATURAL RESOURCES  
EXHIBIT NO. 1  
DATE 4-19-91  
BILL NO. HJR-43

1. Page 2, line 5.  
Strike: "CANNOT BE SUSTAINED"  
Insert: "may decline"

2. Page 2, line 13.  
Page 2, line 19.  
Page 3, line 12.  
Strike: "SUSTAINABLE"  
Insert: "sustained yield"

## MONTANA

# Timber areas face hard times

**KALISPELL (AP)** — A federally financed study predicts job losses, business failures and worker displacement due to a coming contraction in the timber industry in northwestern Montana.

The economic study, involving interviews with more than 370 timber-related businesses in Flathead, Lake, Lincoln and Sanders counties, concluded there will be less timber available for harvest from national forests in northwest Montana.

This will create pressure to expand private woodlots, the study said. It also will probably become more costly to harvest national forest timber because of higher costs of sale preparation and changes in logging practices.

Timber companies will have to be innovative, adaptable and financially stable in order to survive, the study says. Workers will need continual training and retraining.

Because not all the jobs to be lost in logging, trucking and milling will be replaced by employment in wood processing, the area should focus on developing new jobs in other kinds of industries, the study says.

Meanwhile, it says, waste of forest resources, such as burning of potential post, pole and firewood material after sawlog harvests, can no longer be tolerated.

"The changes are inevitable and are no one's 'fault,'" the study concludes. "The transitioning economy should be an issue of serious concern for all Flathead residents, not just those directly involved in the forest industries," the study adds.

Among recommendations made in the report:

- The change in the timber economy must be dealt with as a community problem, not just an industry problem, with wide public

involvement.

- There should be more communication and information-sharing with other states and regions that share in the problem and may be developing ways to cope with it.

- Industry and educational institutions should work together on programs for training and technical assistance.

- The Flathead Economic Development Corp., which sponsored the study, along with others should draw up a specific program to encourage development of value-added wood products businesses.

- The state and the Montana Science and Technology Alliance should be asked to help with funding and services.

The study was financed with a grant from the Forest Service.



# MONTANA LOGGING ASSOCIATION

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April 19, 1991

SENATE NATURAL RESOURCES  
EXHIBIT NO. 3  
DATE 4-19-91  
BILL NO. HJR-43

## Senate Natural Resources Committee

The Montana Logging Association appreciates this opportunity to express our opposition to HJR 43, which requests the Department of State Lands to conduct a study of sustained yield forest management.

Please note that our opposition is not related to the merits of sustained yield; rather, we are concerned that DSL lacks the resources--time, manpower, funding--to adequately perform such a study without distracting from duties of a higher priority.

DSL responsibilities to prenotification (HB 678, 1989) and streamside management zones (HB 731, 1991) may be compromised by such a study, and the MLA respectfully suggests that would undermine efforts to involve private timberland owners in areas of legislative priority.

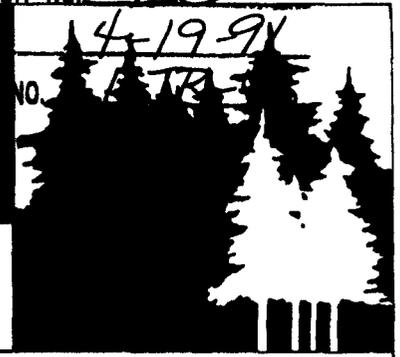
Thank you for considering our position.

Sincerely yours,

A large, stylized handwritten signature in black ink, which appears to read 'Keith L. Olson'. The signature is written over the typed name and title.

Keith L. Olson  
Executive Director

# FOREST INDUSTRY FACTS AND ISSUES



## GROWTH & YIELD

An Intermountain Forest Industry Association Publication • 703 Lakeside Avenue • Coeur d'Alene, Idaho • 83814

*Considering today's debate over how public and private forests should be managed, we decided to offer a "short course" on forest management for this issue of Forest Industry Facts and Issues. It will explain some of the basic terminology and management philosophies of forestry and allow you to look at trees, forests and forest management through the eyes of a forester. Most importantly, it will help you understand the current debate over how fast we harvest timber from our forest lands.*

### Individual Tree Growth

Trees grow as if someone were stacking thin cones of wood on top of one another. In a cross-section of a tree the thickness of these cones appear as concentric rings. Foresters call each ring an *increment* of new growth. The heartwood (the darker wood) is an inactive area that functions as support for the tree. The sapwood is usually one to three inches in width and lighter in color than the heartwood. This active sapwood moves water and dissolved minerals up to the leaves. With the growth of new sapwood each year, part of the inner sapwood becomes inactive and turns into heartwood.

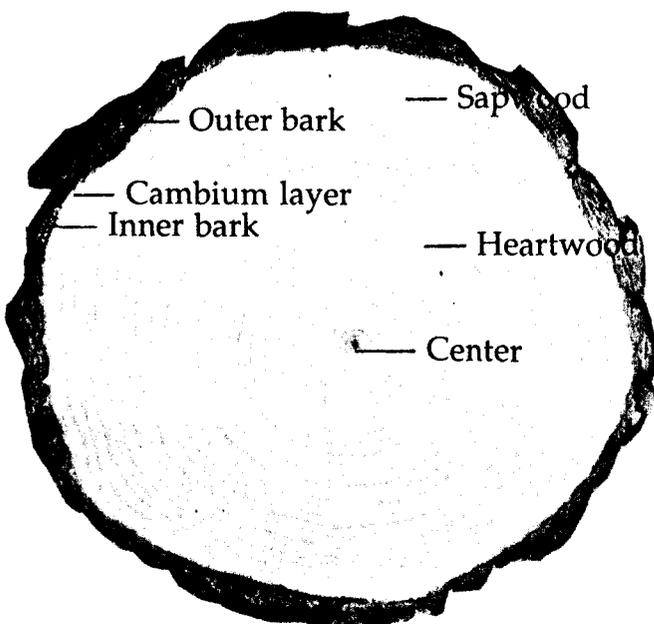
Actual growth in the tree takes place in the *cambium*, a thin layer of cells. As the cells of this cambium layer divide, the inner cells form the sapwood; the outer cells form the inner bark. This layer of soft, moist tissue functions as a conduit to carry the carbohydrates produced in the leaves down to the branches, trunk, and roots. Gradually, the inner bark changes to outer bark.

The trunk increases in diameter each year as a layer of wood is added, and an annual ring is formed. When growth conditions are favorable and food and water are abundant, the rings are wide. When drought occurs, growth slows and the rings are narrow. In the tropics, where the growing season is 12 months long, there are usually no annual rings.

### Forest and Stand Growth

*Annual volume per acre* is a term used by foresters. It is simply the total of each new "ring" of wood grown over an entire acre of forestland in a single year. It's also called the *current annual increment*. The annual volume of growth per acre is usually expressed as additional *board feet* of wood (a board foot is 12x12x1").

When graphed, the growth of a tree over time creates an "S" curve. It illustrates that a tree grows rather slowly in its first year or two, then grows rapidly for the next 40 to 100 years, depending on the quality of the growing site (measured in *site class*, we'll explain that later) and the species of tree. Growth slows down considerably after that.





SENATE STANDING COMMITTEE RECORDS

Page 1 of 1  
April 19, 1991

MR. PRESIDENT:

We, your committee on Natural Resources having had under consideration House Joint Resolution No. 42 (Title reading "and, etc."), respectfully report that House Joint Resolution No. 42 be concurred in.

Witness my hand and the seal of the Senate this 19th day of April, 1991.  
Lawrence H. Chamberlain, Secretary

1-19-91  
Sec. of Senate

1-19-91  
Sec. of Senate

NOTICE OF COMMITTEE EXECUTIVE ACTION

(Do not use for actions resulting in report to floor).

To: Secretary of the Senate

Dated this 19 day of April, 1991.

Committee: Natural Resources

Bill: HJR-43

Action: move to Table HJR-43

Lawrence A. Sturdevant

Signature

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