

INVITATION FOR BIDS
FOR THE SALE OF
STANDING HARDWOOD TIMBER
FOR
THE UNIVERSITY OF MISSOURI-COLUMBIA
COLUMBIA, MISSOURI
BID # 21019

BID CLOSE DATE: Tuesday, October 27, 2020 at 2:00 PM Central Time

Prepared by:
James E. Shatto, Strategic Sourcing
Specialist, UM System Procurement
615 E 52nd St, SOE Room 024
Kansas City, MO 64110
Ph: 816-235-1397
Email: shattoj@umkc.edu

Dated: September 24, 2020

The Curators of the University of Missouri will receive written bids for the Sale of Standing Hardwood Timber located at the University of Missouri Southwest Research Center. Mr. Eric Yarnell, of Yarnell Forestry Consulting, both marked and estimated volumes of the timber in this sale.

The owner of the property is the Curators of the University of Missouri System.

Additional copies of the Specifications and Conditions of bidding along with the required form can be opened and printed at: <https://www.umsystem.edu/ums/fa/procurement/bids>

The Curators of the University of Missouri reserve the right to reject any and all bids.

The sale area may be viewed by prospective bidders prior to bid closing date and time. Please call Dusty Walter (Director of Natural Resource Management) or Reagan Bluel to arrange a visit to the Southwest Research Center.

Dusty Walter: 573-999-1541 (cell)
573-884-7991 (office)

Reagan Bluel 417-466-2148 (Office)
417-772-4231 (Cell)

All sealed bids must be received no later than Tuesday, October 27, 2020 at 2:00 p.m. Central Time and delivered to 615 E. 52nd St, SOE Room 024, Kansas City, MO 64110.

NOTE: DUE TO THE COVID-19 PANDEMIC E-MAILED BID RESPONSES WILL ALSO BE ACCEPTED AT shattoj@umkc.edu.

No oral explanation in regard to the meaning of the specifications will be made. Any questions concerning the specification, terms and conditions or performance of this Invitation for Bid must be submitted IN WRITING to Jim Shatto, UM System Procurement, 615 E. 52nd Street, SOE Room 024, Kansas City, MO 64110. Questions shall be emailed to Jim Shatto at shattoj@umkc.edu. The deadline for questions in regard to this BID is October 15, 2020 at 2:00 PM Central Time. Any interpretation of the proposed documents will be made by addendum duly issued and posted on the UM System Procurement website: <https://www.umsystem.edu/ums/fa/procurement/bids>

It is the responsibility of prospective bidders to check the above website for additional information.

THE UNIVERSITY WILL NOT BE RESPONSIBLE FOR ANY OTHER EXPLANATIONS OR INTERPRETATIONS OF THE PROPOSED DOCUMENTS.

DETAILED SPECIFICATIONS AND SPECIAL CONDITIONS:

I. GENERAL DESCRIPTION:

You are invited to bid on state-owned forest products. Sealed bids will be received by Jim Shatto, Strategic Sourcing Specialist, at the UM System Procurement Office, 615 E. 52nd Street, SOE Room 024, Kansas City, MO, 64110 until 2:00 PM, Central Time, Tuesday, October 27, 2020 and should be marked “SEALED BID 21019 FOR STANDING HARDWOOD TIMBER-SOUTHWEST RESEARCH CENTER”.

NOTE: DUE TO THE COVID-19 PANDEMIC E-MAILED BID RESPONSES WILL ALSO BE ACCEPTED AT shattoj@umkc.edu.

Location & Directions

The University of Missouri Southwest Research Center property is located in Sections 3 and 4 in Township 27N, Range 27W, and Section 34 in Township 28N, Range 27W in Lawrence County, Missouri. All of the relevant property boundaries are fenced, though there are several cross fences as well.

The property is located 4 miles southwest of Mount Vernon, Missouri. From westbound I-44, take exit 44 off I-44. Turn left onto Highway H and follow for 2 miles. From eastbound I-44, take exit 38. Then continue east 4 miles on south outer road. The address for the main office building is 14548 Highway H, Mt. Vernon, MO. See included maps for more detailed information to find the marked timber.

Description of Property & Access

There are about 590 total acres on the tracts that contain the marked timber, and timber is actually marked on approximately 45 acres. The location of the marked timber is shown on the included maps. The terrain is mildly sloping, though there may be a few locations that will require water bars to be installed. There are several gates to access the property, some or all of which may be locked, so an appointment must be made to view the timber.

Description of Marked Timber:

There are 329 oak, hickory, and black cherry trees marked with orange rings painted at eye level and orange dots near the ground. These trees have an estimated total volume of 55,673 board feet using the International Log Rule. There are also some trees painted with orange Xs that may be harvested but are assumed to have no merchantable volume. Table 3 summarizes the number of trees marked, volume, average DBH, average merchantable height, and average volume per tree for each species. Table 4 shows the same information as Table 3, only broken down by stand as well as species. Table 5 shows the volume and tree counts by species and DBH. The average DBH of these trees is 19.7 inches, the average merchantable height is 16.5 feet, and the average volume per tree is 169.2 board feet International. The quality of the oak timber is mostly average for the area. There have been cattle present in many of the areas where timber is marked.

Bid Instructions: LUMP SUM BID IS REQUIRED. (Please insert your price in the “bid form” that follows in this document.)

II. INSPECTION OF PREMISES / QUESTIONS:

Bidders are urged to completely inspect project site prior to submitting a bid in order to determine all requirements associated with the contract. Failure to do so shall not relieve the successful bidder from the necessity of performing in accordance with the specifications herein, without additional cost to the University. Please call and notify Dusty Walter, Director of Natural Resource Management (573-999-1541) or Reagan Bluel, Area Superintendent (417-772-4231).

In case of any doubt or difference of opinion as to the performance and obligation of both parties concerning this Invitation for Bids, the decision of the Director of University of Missouri System Procurement, shall be final and binding upon both parties.

III. BIDS:

A lump sum bid for the total volume of timber offered must be enclosed in a SEALED ENVELOPE plainly marked "SEALED BID 21019 FOR STANDING HARDWOOD TIMBER-SOUTHWEST RESEARCH CENTER".

Bids not plainly marked "SEALED BID 21019 FOR STANDING HARDWOOD TIMBER-SOUTHWEST RESEARCH CENTER" are subject to rejection. Any bidder may withdraw his bid any time prior to the scheduled opening time for the receipt of bids. No bidder may withdraw his/her bid for a period of thirty (30) days after the scheduled closing time for the receipt of bids. Only telegram, letters, emails or other written requests for corrections of a previously submitted bid which are addressed in the same manner as bids AND ARE RECEIVED BY THE UNIVERSITY PRIOR TO THE SCHEDULED CLOSING TIME FOR THE RECEIPT OF BIDS WILL BE ACCEPTED.

The acceptance of the best highest and responsive bid hereunder shall be by action of The Curators of the University of Missouri. The Curators of the University of Missouri reserve the right to reject any and all bids.

[NOTE: DUE TO THE COVID-19 PANDEMIC E-MAILED BID RESPONSES WILL ALSO BE ACCEPTED AT shattoj@umkc.edu.](mailto:shattoj@umkc.edu)

IV. PERFORMANCE SECURITY:

The successful bidder shall submit a Cashier's Check payable to "The Curators of the University of Missouri" without condition in the amount equal to ten-percent (10 %) of the total amount of the bid as security for faithful performance in accordance with the specifications herein. Any damage not satisfactorily corrected by the buyer shall be charged against this security. Any surplus remaining will be returned to the buyer. If there are no claims against the performance security it shall be returned within 30 days of notification by the buyer to the University Point of Contact that he/she has completed the harvest.

V. PERIOD OF PERFORMANCE:

Notice of award will be given within a reasonable time after the scheduled closing date for the receipt of bids. After receiving notice of award and making payment in full payment of

Performance Security, and notifying the Point of Contact, the successful bidder may begin cutting and removal operations. All terms and conditions covered by the contract shall be completed within the period stated in the accepted option.

Performance: All work must be completed within six (6) months from the date of granting of the contract. However, if in the judgment of the Director of Natural Resource Management, the work has to be delayed by unfavorable weather or other circumstances deemed beyond the control of the successful bidder, the completion date may be extended by the University.

VI PAYMENT:

Total payment of Lump Sum Bid and Performance Security must be made before harvesting of the tract begins. Payment will be made by Certified or Cashier's Check, payable without condition to "The Curators of the University of Missouri" and delivered to James E. Shatto, Strategic Sourcing Specialist, UM System Procurement, 615 E. 52nd Street, SOE Room 024, Kansas City, MO 64110.

VII TERMS AND CONDITIONS OF SALE:

The University agrees to sell to the successful bidder the marked Hardwood trees on the Southwest Research Center, designated herein. A University representative shall determine bidder's access to sites.

The following conditions and methods of operation will apply to this sale:

- a. This contract may not be assigned in whole or in part by the purchaser without written consent of the seller.
- b. Purchaser shall conduct all operations under this contract in a safe, workman-like and orderly manner; minimize soil erosion and damage to young growth or trees left standing.
- c. Care shall be exercised by the purchaser and his employees against the starting and spread of fire, and they shall take all responsible precautions to prevent and control fire. In the event that a forest fire occurs on the sale area or the vicinity, the purchaser and his employees will notify the Point of Contact for the University of Missouri and assist in the suppression of the fire if requested.
- d. Trees that are cut will be dropped to the ground and not left "hung up" on adjacent trees. Use of directional felling in order to reduce damage to all residual trees is desirable.
- e. The Purchaser shall avoid, whenever possible, felling any trees onto any adjoining open fields, roads, or woods not owned by the Sellers. Should this occur, the Purchaser shall move all material back onto the Sellers' land immediately. In the event of damage to fencing or other material property Purchaser will call the Point of Contact.
- f. Use of Best Management Logging Practices to minimize soil compaction/disturbance and potential water quality problems is expected. The Point of Contact, or his designee, will work with the winning bidder to define an appropriate decking and loading area.
- g. Stump heights resulting from harvesting will be as close to the ground as practical; however, they are not to exceed 6 inches above the ground line on the high side of the stump unless multiple stems or other similar conditions make the requirement impractical.
- h. The purchaser shall carry out his operations in such a manner as to cause the least damage to the remaining trees, roads, improvements and watershed. The Director of Natural

Resource Management may temporarily terminate any or all parts of the purchaser's operations on the farm, should these operations, in his opinion, be causing or likely to cause damage to the above. The number of working days that the purchaser's operations are terminated for this reason may be added to the term of this contract upon request of the purchaser.

- i. Damage to access roads will be repaired after completion of log hauling. Any unrepaired damage will be paid for from the performance security being held in escrow.
- j. Damage to property fences will be repaired immediately. Any unrepaired damage will be paid for from the performance security being held in escrow.
- k. Purchaser shall keep ponds and stream courses, including intermittent stream beds, within the sale area clear of debris resulting from his operations.
- l. Landings: Shall be identified as part of the pre-harvest plan. Landings should be no larger than is needed to facilitate an efficient logging operation. Landing location and use must follow Best Management Practices.
- m. Purchaser shall, upon completion of logging activities, clear the landing of debris (butts, limbs, etc.).
- n. Trees not designated for cutting that are cut or unnecessarily damaged by the Buyer shall be paid for, in addition to the value of the designated timber, at a rate three (3) times the current stumpage value of the designated timber that is cut or damaged. Current stumpage value shall be determined by the average stumpage price paid by three local mills which are mutually selected by the Buyer and the Seller.
- o. Continued disregard for these conditions and requirements shall be sufficient cause for termination of this contract and forfeiture of all payments to date. All remaining timber shall revert to the University.
- p. Before logging operations begin, the purchaser and the Point of Contact or his/her designee will review the terms and conditions of this contract. The Point of Contact or his/her designee will be kept informed of the progress of the operations. Point of Contact shall also be notified by the purchaser when harvesting will begin, at least two working days prior to the harvesting period.
- q. All trees and portions of trees covered by this contract, or its extension, if not removed from University land within 30 days after the termination date, shall remain the property of the Curators of the University of Missouri.
- r. All structures, equipment, and refuse brought to the area by the successful bidder (paper, oil cans, etc) will be removed from University land by the date of termination of this contract.
- s. The boundaries of the sale area and any cutting blocks thereof, are as shown on the attached "Sale Area Map", which is made a part of this contract. Cutting blocks shall not be changed without the consent of both the Buyer and the Seller.
- t. In the event that a dispute develops concerning terms of the agreement or conditions of operation, all work shall cease until the matter is resolved. If the purchaser and the Point of Contact are unable to resolve disputes, it shall be referred to the Director of UM System Procurement whose decision shall be final and binding. Time lost during the dispute will be added to the expiration date.
- u. Buyer agrees to comply with applicable laws of the State of Missouri.

VIII INSURANCE WAIVER:

In lieu of insurance coverage (see Exhibit I), the purchaser agrees to the following waiver:

The purchaser agrees not to sue the Curators of the University of Missouri, their agents and employees, and to refrain forever from instituting any legal proceedings of any law or inequity against the Curators of the University of Missouri, their agents and employees, arising out of or from the bidder's occupancy or use of the property covered in the Invitation for Bid or arising from any condition which does now or may at any time exist on this property, or arising from any occurrence occasioned wholly or in part by any act or omission of the Curators of the University of Missouri, its agents, contractors, concessionaires, employees and servants. The purchaser further is aware that there may be hazardous conditions on this property and hereby voluntarily accepts and assumes all risks from these conditions and agrees to incur these risks as a condition of the Invitation of Bids.

Printed Name _____

Signature: _____
(must be owner or officer of purchaser)

Date: _____

BID #21019
BID CLOSING DATE: October 27, 2020
TIME: 2:00 PM Central Time.

FORM OF BID

(NAME OF FIRM OR INDIVIDUAL SUBMITTING THIS BID)

DATE: _____, 2020

INVITATION FOR BIDS
FOR THE SALE OF
STANDING HARDWOOD TIMBER
FOR THE
CURATORS OF THE UNIVERSITY OF MISSOURI
AT THE
UNIVERSITY OF MISSOURI- COLUMBIA
DATED: September 24, 2020

The Curators of the
University of Missouri
Columbia, Missouri 65211-3100

1. The undersigned being familiar with the Invitation for Bid, hereby proposes to pay the University for STANDING HARDWOOD TIMBER located at the Southwest Research Center as described in the specifications for Sale:

Operation to be completed six months from date of award.

Lump Sum Bid \$ _____

2. In submitting this bid, it is agreed that it may not be withdrawn for a period of thirty (30) days after the scheduled opening date for the receipt of bids, and it is understood that the right is reserved by the University to reject any or all bids.
3. *Accompanying this bid is the performance security required by the Invitation for Bids.*
Yes _____ *No* _____
4. The bidder certifies that he has examined the site and timber covered by this bid and has prepared this bid based upon his own observation, and had not relied upon the representatives of the owners or any representative thereof. Yes _____ No _____

IF A CORPORATION:

Name of Corporation

Incorporated under the laws of the State of: _____

Licensed to do business in Missouri: _____ YES _____ NO (check one)

Name and Title of Officer

Signature

Address for Communications

Address for Communications

Phone Number

Fax Number

E-mail address

IF A PARTNERSHIP:

Name of Partnership

Names and residence address of all partners:

Partner

Signature

Address for Communications

Address for Communications

Phone Number

Fax Number

E-mail address

IF AN INDIVIDUAL:

Name of Individual

Residence Address:

Firm Name, If Any

Signature

Address for Communications

Address for Communications

Phone Number

Fax Number

E-mail address

EXHIBIT I.

INSURANCE REQUIREMENTS (Low Risk)

Contractor agrees to maintain, on a primary basis and at its sole expense, at all times during the life of any resulting contract the following insurance coverages, limits, including endorsements described herein. The requirements contained herein, as well as the University's review or acceptance of insurance maintained by Contractor is not intended to and shall not in any manner limit or qualify the liabilities or obligations assumed by Contractor under any resulting contract. Coverage to be provided as follows by a carrier with A.M. Best minimum rating of A- VIII.

Commercial General Liability Contractor agrees to maintain Commercial General Liability at a limit of not less than \$1,000,000 Each Occurrence, \$2,000,000 Annual Aggregate. Coverage shall not contain any endorsement(s) excluding nor limiting Product/Completed Operations, Contractual Liability or Cross Liability.

Contractor may satisfy the minimum liability limits required for Commercial General Liability or Business Auto Liability under an Umbrella or Excess Liability policy. There is no minimum per occurrence limit of liability under the Umbrella or Excess Liability; however, the Annual Aggregate limit shall not be less than the highest "Each Occurrence" limit for either Commercial General Liability or Business Auto Liability. Contractor agrees to endorse the University as an Additional Insured on the Umbrella or Excess Liability, unless the Certificate of Insurance state the Umbrella or Excess Liability provides coverage on a "Follow-Form" basis.

Note: Anyone who serves alcoholic beverages on a University of Missouri Campus must also provide liquor liability coverage. This should be written on an "occurrence basis" and have limits not less than \$1,000,000 each claim or each common cause and at least a \$1,000,000 aggregate. The insurance carrier, policy number, effective date and limits should be shown on an insurance certificate provided to the University of Missouri. The Curators of the University of Missouri should be named as an Additional Insured on such policy and a copy of the endorsement should be provided along with the certificate of insurance.

Business Auto Liability (If required in service performance) Contractor agrees to maintain Business Automobile Liability at a limit not less than \$1,000,000 Each Occurrence. Coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event Contractor does not own automobiles, Contractor agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Workers' Compensation & Employers Liability Contractor agrees to maintain Workers' Compensation in accordance with Missouri State Statutes or provide evidence of monopolistic state coverage. Employers Liability with the following limits: \$500,000 each accident, disease each employee and disease policy limit.

Contract Language

The Curators of the University of Missouri, its officers, employees and agents are to be Additional Insured with respect to the project to which these insurance requirements pertain. A certificate of

insurance evidencing all coverage required is to be provided at least 10 days prior to the inception date of the contract between the contractor and the University. Contractor/Party is required to maintain coverages as stated and required to notify the University of a Carrier Change or cancellation within 2 business days. The University reserves the right to request a copy of the policy. The University reserves the right to require higher limits on any contract provided notice of such requirement is stated in the request for proposals for such contract.

Indemnification

The Contractor agrees to defend, indemnify, and save harmless The Curators of the University of Missouri, their Officers, Agents, Employees and Volunteers, from and against all loss or expense from any cause of action arising from the Contractor’s operations. The contractor agrees to investigate, handle, respond to and provide defense for and defend against any such liability, claims, and demands at the sole expense of the Contractor or at the option of the University, agrees to pay to or reimburse the University for the Defense Costs incurred by the University in connection with any such liability claims, or demands.

The parties hereto understand and agree that the University is relying on, and does not waive or intend to waive by any provision of this Contract, any monetary limitations or any other rights, immunities, and protections provided by the State of Missouri, as from time to time amended, or otherwise available to the University, or its officers, employees, agents or volunteers.

Failure to maintain the required insurance in force may be cause for contract termination. In the event the Agency/Service fails to maintain and keep in force the required insurance or to obtain coverage from its subcontractors, the University shall have the right to cancel and terminate the contract without notice.

The insurance required by the provisions of this article is required in the public interest and the University does not assume and liability for acts of the Agency/Service and/or their employees and/or their subcontractors in the performance of this contract.

The Contractor does hereby indemnify, defend, and save harmless The Curators of the University of Missouri, their Officers, Agents and Employees, from and against all loss or expense from any cause of action arising from the Supplier’s operation.

INSURANCE REQUIREMENTS (Low Risk) SMALL BUSINESS

(Examples: vendors and contractors with less than 50 employees)

Contractor agrees to maintain, on a primary basis and at its sole expense, at all times during the life of any resulting contract the following insurance coverages, limits, including endorsements described herein. The requirements contained herein, as well as the University’s review or acceptance of insurance maintained by Contractor is not intended to and shall not in any manner limit or qualify the liabilities or obligations assumed by Contractor under any resulting contract. Coverage to be provided as follows by a carrier with A.M. Best minimum rating of A- VIII.

Commercial General Liability Contractor agrees to maintain Commercial General Liability at a limit of not less than \$1,000,000 Each Occurrence. Coverage shall not contain any endorsement(s) excluding nor limiting Product/Completed Operations, Contractual Liability or Cross Liability.

Contractor may satisfy the minimum liability limits required for Commercial General Liability or Business Auto Liability under an Umbrella or Excess Liability policy. There is no minimum per occurrence limit of liability under the Umbrella or Excess Liability; however, the Annual Aggregate limit shall not be less than the highest "Each Occurrence" limit for either Commercial General Liability or Business Auto Liability. Contractor agrees to endorse the University as an Additional Insured on the Umbrella or Excess Liability, unless the Certificate of Insurance state the Umbrella or Excess Liability provides coverage on a "Follow-Form" basis.

Note: Anyone who serves alcoholic beverages on a University of Missouri Campus must also provide liquor liability coverage. This should be written on an "occurrence basis" and have limits not less than \$1,000,000 each claim or each common cause and at least a \$1,000,000 aggregate. The insurance carrier, policy number, effective date and limits should be shown on an insurance certificate provided to the University of Missouri. The Curators of the University of Missouri should be named as an Additional Insured on such policy and a copy of the endorsement should be provided along with the certificate of insurance.

Business Auto Liability (If required in service performance) Contractor agrees to maintain Business Automobile Liability at a limit not less than \$1,000,000 Each Occurrence. Coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event Contractor does not own automobiles, Contractor agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Workers' Compensation & Employers Liability (Waiver) Contractor agrees to maintain Workers' Compensation in accordance with Missouri State Statutes or provide evidence of monopolistic state coverage. Employers Liability with the following limits: \$500,000 each accident, disease each employee and disease policy limit. **Waiver of this requirement** - If Contractor is not required to maintain coverage by Missouri State Stature and they submit a completed UM waiver form.

Contract Language

The Curators of the University of Missouri, its officers, employees and agents are to be Additional Insured with respect to the project to which these insurance requirements pertain. A certificate of insurance evidencing all coverage required is to be provided at least 10 days prior to the inception date of the contract between the contractor and the University. Contractor/Party is required to maintain coverages as stated and required to notify the University of a Carrier Change or cancellation within 2 business days. The University reserves the right to request a copy of the policy. The University reserves the right to require higher limits on any contract provided notice of such requirement is stated in the request for proposals for such contract.

Indemnification

The Contractor agrees to defend, indemnify, and save harmless The Curators of the University of Missouri, their Officers, Agents, Employees and Volunteers, from and against all loss or expense from any cause of action arising from the Contractor's operations. The contractor agrees to investigate, handle, respond to and provide defense for and defend against any such liability, claims, and demands at the sole expense of the Contractor or at the option of the University, agrees to pay to or reimburse the University for the Defense Costs incurred by the University in connection with any such liability claims, or demands.

The parties hereto understand and agree that the University is relying on, and does not waive or intend to waive by any provision of this Contract, any monetary limitations or any other rights, immunities, and protections provided by the State of Missouri, as from time to time amended, or otherwise available to the University, or its officers, employees, agents or volunteers.

Failure to maintain the required insurance in force may be cause for contract termination. In the event the Agency/Service fails to maintain and keep in force the required insurance or to obtain coverage from its subcontractors, the University shall have the right to cancel and terminate the contract without notice.

The insurance required by the provisions of this article is required in the public interest and the University does not assume and liability for acts of the Agency/Service and/or their employees and/or their subcontractors in the performance of this contract.

Table 3. UM SW Center Marked Oak Timber Summary by Species

Species		Bf Intl.	QMD (in.)	Avg. Merch. Ht. (ft.)	Avg. Bf/Tree
white oak	101	21303.2	22.0	15.9	210.9
red oak group	161	26289.8	19.0	17.5	163.3
hickory	31	4080.8	17.5	12.1	131.6
post oak	27	3141.0	18.5	18.5	116.3
black cherry	9	857.8	16.1	13.3	95.3
Total	329	55672.7	19.7	16.5	169.2

Table 4. UM Southwest Center Oak Timber Summary by Species and Stand

Species	Stand 1					Stand 2				
	# Trees	QMD	Bf Intl.	Avg. Merch Ht.	Avg. Bf/Tree	# Trees	QMD	Bf Intl.	Avg. Merch Ht.	Avg. Bf/Tree
white oak	101	22.0	21303.2	15.9	210.9	0				
red oak group	95	19.4	15573.7	16.8	163.9	66	18.5	10716.1	18.5	162.4
hickory	9	18.6	1371.0	15.1	152.3	22	17.0	2709.8	16.0	123.2
post oak	23	18.6	2662.4	11.8	115.8	4	17.7	478.6	14.0	119.7
black cherry	5	16.0	455.0	12.8	91.0	4	16.3	402.8	14.0	100.7
Total	233	20.4	41365.3	15.8	177.5	96	18.0	14307.4	17.6	149.0

Table 5. UM SW Center Oak Timber Sale Volume and Tree Counts by Species and DBH

DBH	Species										Total	
	red oak group		white oak		hickory		post oak		black cherry			
	# Trees	Vol.	# Trees	Vol.	# Trees	Vol.	# Trees	Vol.	# Trees	Vol.	# Trees	Vol.
14	13	904			5	274	3	146			21	1324
15	18	1635	5	387	4	263	6	481	2	114	35	2881
16	22	2426	4	304	5	603	4	381	5	487	40	4201
17	22	3120	17	1664	4	481	2	151	1	121	46	5537
18	15	2142	3	457	5	779	4	495	1	136	28	4010
19	12	2229	4	669	4	669	1	209			21	3776
20	10	2015	9	1303	1	108					20	3427
21	12	2840	12	1835			3	431			27	5105
22	9	1814	7	1473	1	288					17	3575
23	10	2566	11	2626	1	317	1	147			23	5655
24	5	1156	8	1964			1	252			14	3372
25	4	1208	5	1279							9	2487
26	4	1086	8	2620	1	298					13	4004
27	5	1150	5	1629			1	207			11	2986
28			5	1617							5	1617
29							1	241			1	241
30			2	661							2	661
32			1	815							1	815
Total	161	26290	106	21303	31	4081	27	3141	9	858	334	55673

Timber was measured, graded, and marked by Eric Yarnell of Yarnell Forestry Consulting in Marshfield, Missouri.

University of Missouri Southwest Center Oak Timber Sale Map

