Alabama State Board of Registration for Foresters (ASBRF) Exam Information & Study Guide

Examination Process and Rules

All qualified and approved exam registrants must take the ASBRF written exam. A registrant with ten plus years of forestry experience may make a written request upon application to take the oral exam instead of the written exam. The Board sets the dates and times for exams.

Examinations are scheduled quarterly at the Alabama Forestry Commission Office, 513 Madison Avenue, Montgomery, Alabama 36104. Parking is available in the AFC parking areas behind the building. Secure access doors are located at the front and back of the building. You must have a photo identification to take the exam.

The examination is scheduled for 6 hours and starts at 8:30 am with a morning section to be completed by lunch and submitted to the exam administrator. The afternoon section starts after lunch and is submitted to the exam administrator at 4:00 pm. If you qualify for extended time to take the exam, you must request it at the time of exam registration so exam administrators can schedule their availability.

The exam is open-book (print form only) and the registrant may bring any books, articles, and a portable calculator of their choosing to the exam. This "Exam Information" guide can also be brought to the exam as a printed reference source. No laptops, tablets or cell phones or other electronic devices are permitted in the possession of the registrant during the exam.

Registrants will be notified by mail of the examination results. Call or email Lea Anna Meadows, Executive Director, ASBRF if you have any questions: 334 240-9301 or email: LeaAnnaMeadows@asbrf.alabama.gov.

The Examination

The examination is one hundred (100) discussion or word mathematical problem format questions and covers 21 major forestry topic groupings. The registrant is encouraged to study and prepare for the exam prior to attempting to take it. Forestry school textbooks, exams, and notes along with published forestry books, forestry related websites and web-based articles can be good study sources. The exam requires critical thinking and application of knowledge. It is beneficial to understand not only the basic knowledge of "how or what" of a forestry related topic but also the "why, when and where" to utilize the knowledge.

Exam Topic Study Sources

- 1. Forestry textbooks, forestry tests, forestry education notes, professional seminars, etc.
- 2. Alabama Forestry Commission (AFC) Website, fire, forest management

- 3. **Alabama Prescribed Burning Guide**, Alabama Forestry Commission. Available online: https://forestry.alabama.gov/Pages/Fire/Forms/Rx Burning Guide.pdf
- 4. **Managing Forests on Private Lands in Alabama and The Southeast,** \$65, Alabama Forestry Foundation c/o Alabama Forestry Association, Montgomery, AL. <u>Books Alabama Forestry Foundation</u>
- 5. *Dictionary of Forestry, 2nd edition,* \$39.95 (\$35.95-SAF Members) The Society of American Foresters, Washington, D.C.
- 6. Alabama Best Management Practices for Forestry, Alabama Forestry Commission, (website)
- 7. Alabama State Board of Registration for Foresters (Roster or website)
- 8. Alabama Cooperative Extension System (ACES), www.aces.edu
- 9. Alabama Forestry Association website
- Tree Farm, Treasure Forest, Sustainable Forestry Initiative (SFI), Forest Stewardship Council (FSC), forest landowner/forest manufacturing certification websites. Note SFI certification also applies to logging industry.
- 11. US Forest Service, USDA publications and websites
- 12. Internet sources of reputable forestry information that would be applicable to Alabama forestry practice.

Suggested Specific Topic Sources to Study

Fire Management:

- 1. Alabama Prescribed Burning Guide, Alabama Forestry Commission. Free Hardcopy or available online: Fire Behavior Factors (weather), Prescribe Burn Laws, Certified Burn Managers, Smoke Management, Plan Importance, Fire Uses.
- 2. Alabama Forestry Commission, website: all fire topics, including, but not limited to fire laws, fire weather resources, fire warnings and restrictions, prescribed burning, wildfire prevention, protection, and suppression, etc.

Dendrology – "100 Forest Trees of Alabama" is on the Alabama Forestry Commission weblink and covers distinguishing tree characteristics, geographical distribution, and habitat, all important in identifying the most important trees in forest management. There are numerous website sources for invasive species (Source 8. ACES is recommended), and other current tree identification resource publications.

Tree Physiology and Ecology – the broad topic resources above can help study tree physiology and ecology that defines how trees live, grow, reproduce, and interact within their ecosystems. Source 4. *Managing Forests on Private Lands in Alabama...* is a useful resource for forest tree silvics including practical implications of physiology and ecology to forest management.

Forest Health: Pathology, Entomology, Abiotic Agents - the broad topic resources above can help study for these topics. Internet sources like Alabama Forestry Commission website and Alabama Extension Service and other website sources provide information on forest health topics. Source 4. *Managing Forests on Private Lands in Alabama...* has information on forest health topics.

Wildlife Management - the broad topic resources above can help study this topic. Source 4. *Managing Forests on Private Lands in Alabama...* has some information on forest wildlife management. The current

wildlife section of the exam covers Forest Habitats suited for game and none-game species (especially but not limited to birds that are habitat sensitive), Silvicultural impacts on wildlife habitats and plant succession, and wildlife biology and population management.

Soils & Geology – the broad topic resources above are useful resources for soils and geology of Alabama and their relationship to trees and forest ecosystems. Alabama physiographic regions, soil physical, chemical, and nutrient properties, all have impacts on forestry. There are numerous sources of information online as well as Source 4. *Managing Forests on Private Lands in Alabama...* has good practical information in several of its chapters.

Genetics - the broad topic resources above can help study genetics. The large nursery companies that breed their own nursery stock may have literature on modern genetic breeding and testing.

Forest Management, Silviculture and Watershed Management - the broad topic resources above can help study for these topics. Source 4. *Managing Forests on Private Lands in Alabama...* has good practical information in several of its chapters.

Forest Recreation, Urban Forest Management - the broad topic resources above can help study these topics. The current recreation section is applicable to private lands and covered in Source 4. *Managing Forests on Private Lands in Alabama*. Urban Forest Management covers broad management factors of urban trees and their impacts in the urban environment. Arboriculture-tree pruning techniques are also important.

Forest Measurements, Inventory, Sampling - the broad topic resources above can help study these topics. Source 4. *Managing Forests on Private Lands in Alabama...* has good practical information in several of its chapters.

Spatial Analysis: Surveying, Photogrammetry, Remote Sensing, GIS, Mapping - the broad topic resources above can help study for these topics. Source 4. *Managing Forests on Private Lands in Alabama...* has good practical information in several of its chapters.

Harvesting, Procurement and Wood Products – this group of topics is learned more from experience than formal education for many foresters though harvesting, and wood products are available or options in some forestry curriculums. Procurement is the supply chain business of purchasing standing timber, logs or wood chips and managing logistics of flow into manufacturing facilities with supply and demand factors in constant imbalances. Source 4. Managing Forests on Private Lands in Alabama...has good practical information in several of its chapters on all three of these topics. Source 6. Alabama Best Management Practices for Forestry is a specific source of study for the Harvesting topic also.

Finance, Economics and Tax - There are financial calculation questions in all three of these topic areas. The broad topic resources above can help study for these topics. Source 4. *Managing Forests on Private Lands in Alabama...* has good practical information on these topics. A list of basic formulas is provided below to assist with your study and can be used as a reference on the exam:

a = annual payment (cost or income) $V = single \ value \ (V_0 = Value \ year \ zero; V_n = value \ year \ n)$

i = interest rate (decimal format 6%=0.06)

n = number of years (for a single payment or annual series of payments or costs)

Future Value of a single sum of \$ compounded to year n: $FV = V_0(1+i)^n$

Present Value of a single sum of \$ discounted from year n: $PV=V_n[1/(1+i)^n]$

Future Value of a terminating series of annual recurring cost or income: FV=a{[(1+i)ⁿ-1]/i}

Present Value of a terminating series of annual recurring cost or income: $PV=a[(1+i)^n-1]/[i(1+i)^n]$

Net Present Value = sum of all the discounted periodic and annual costs and revenues.

Internal Rate of Return is the **interest rate** that yields NPV=0: IRR=NPV iterative process of trial-anderror changes in NPV interest rate until NPV is approximately 0. Note most timberland IRRs are calculated to 1/100 of a percent accuracy and once achieved stops computer loop refining iterations.

Forest Law – There are many federal, state, and local laws impacting forestry. Since most forest operations are conducted by contractors (like loggers, site preparation and planting contractors, etc.) contract law is crucial to agreement and accountability of forestry operations. The broad topic resources above can help study this topic. Source 4. *Managing Forests on Private Lands in Alabama...* has some information on forest laws and contracts. Registered Forester Laws are also covered and available on the Registered Foresters website.

Professional Forester Ethics - The broad topic resources above may help study this topic. A source of particular importance is the Alabama State Board of Registration of Foresters "Rules of Conduct" found on the ASBRF website, or in the printed "...Roster of Foresters" Appendix A, with which licensed Registered Forester applicants are required to accept and to comply. The Society of American Foresters website includes the SAF Code of Ethics for professional foresters. While some of the SAF code detail is not explicitly in the ASBRF Rules of Conduct there is a good portion that is recognizable. There is also a link at the end of the SAF Code of Ethics: "The SAF Ethics Code Guide (2004)" that goes through several case studies of foresters having to make ethical decisions in their practice.

We hope this exam guide has been helpful. Please contact Lea Anna Meadows, Executive Director, Alabama board of Registration for Foresters if you have questions or wish to provide feedback.