Consulting Forestry Services

Expertise in Managing and Preserving Forest Resources

Presented by:

Kellen Murphy
Senior Certified Forester

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Presenter

Kellen Murphy

Education

- Graduated Ranger School in 2007
- Graduated SUNY ESF in 2009

Professional Experience

- Procurement Forester – Harden Furniture
- Owner - Murphy Forest Management, LLC

Certifications and Affiliations

- SAF Certified Forester
- NRCS Technical Service Provider
- NYS DEC Cooperating Forester
- Licensed Commercial Pesticide Applicator
- Chair of NYS Tree Farm

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Purpose of Consulting Forestry

Help landowners achieve their forest management goals

- Tailor management plans to individual landowner objectives
- Ensure compliance with relevant laws and conservation practices

Provide expertise in sustainable and profitable forest management

- Implement best practices for long-term forest health and productivity
- Maximize economic returns through efficient resource management

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Management Planning

Goal Setting with Landowners

Understanding the landowner's objectives for their forest

- Discuss desired outcomes: conservation, revenue generation, recreation, etc.
- Identify any specific concerns or limitations related to the property

Developing Management Plans

Options: 480a, 106CPA, Tree Farm, etc.

- Evaluate eligibility for programs and incentives
- Customize plans to align with the landowner's goals and regulatory requirements

Conducting Inventory

Timber cruise to assess stands, stocking, quality, and potential issues

- Collect detailed data on tree species, sizes, and overall forest health
- Identify potential risks such as pests, diseases, or overstocking

Recommendations for a 10-20 year management period

- Develop actionable steps for sustainable forest management
- Provide a timeline for periodic reviews and plan adjustments

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Timber Sales

Assisting with Timber Sales

Representation of landowners in the sale of their timber

- Negotiate with buyers to ensure fair market value
- Manage contracts and ensure legal compliance throughout the sale process

Harvest Methods

Individual tree marking

- Select specific trees for harvest to meet management goals
- Focus on promoting forest health and sustainability

Prescription-based harvest

- Implement harvest strategies based on forest inventory data
- Tailor harvesting to improve forest structure and species composition

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Timber Sales

Sale Options

Lump sum offer with upfront payment

- Secure payment before logging begins
- Provide financial security for the landowner

Scale harvest with pay-as-the-logger-cuts method

- Payment based on actual volume harvested
- Allows for ongoing monitoring and adjustment during the harvest

Forester Compensation

Commission-based (10-25% of sale value)

- Aligns forester's incentives with maximizing timber sale value
- Commonly used for larger or high-value sales

Alternatives: $/mbf, flat fee, or hourly rates

- $/mbf (dollars per thousand board feet) ties payment to timber volume
- Flat fee or hourly rates offer predictable costs for smaller or straightforward projects

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Timber Trespass

Dealing with Timber Theft

Landowner's responsibility to prove property boundaries

- Importance of having accurate and up-to-date property surveys
- Steps to take immediately after discovering potential timber theft

Role of Consulting Foresters

Measuring stumps and estimating volume and value of stolen timber

- Use of professional tools and techniques to accurately estimate losses
- Documentation and reporting to support legal action

Providing expert witness testimony in court

- Presenting evidence and expert analysis to support the landowner's case
- Assisting attorneys in understanding forestry practices and valuation

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Managing Invasive Species

Removal of invasives like rose, honeysuckle, and buckthorn

- Targeted herbicide applications to eliminate invasive species
- Reducing competition for native trees and promoting healthy forest ecosystems

Controlling interfering plants such as beech and ferns

- Managing species that hinder the growth of desired tree species
- Improving forest regeneration and overall stand quality

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Timber Stand Improvement (TSI)

Chemical herbicides as a cost-effective solution

- Selective application of herbicides to reduce labor costs and increase effectiveness
- Ensuring the use of environmentally safe products and methods

Pre-mature forest thinning to promote growth of quality trees

- Removing weaker or less desirable trees to allow room for healthier trees to thrive
- Enhancing the overall value and quality of the forest stand over time

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Reforestation

Reforestation Strategies

Planting hardwoods in deer-protected shelters

- Use shelters or cages to prevent deer browsing and ensure higher survival rates
- Ideal for establishing valuable hardwood species in high-deer-pressure areas

Planting softwoods like spruce, pine, and fir without shelters in low deer areas

- Select softwood species that are less attractive to deer
- Focus on areas with lower deer populations where protection is less critical

Site preparation with chemical treatments for enhanced growth

- Apply pre-planting herbicides to reduce competition from weeds and invasive species
- Boost early tree growth by minimizing resource competition

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Reforestation

Reforestation Scenarios

Under a thinned canopy

- Reforest under partial shade where selective thinning has been performed
- Utilize existing canopy to protect young trees and promote gradual forest regeneration

In clearcut stands

- Establish a new forest generation in areas where the entire stand has been harvested
- Plan for species diversity and appropriate planting density to achieve long-term management goals

On former agricultural fields

- Transition open fields back to forest, addressing challenges like soil degradation
- Select species suited to the altered soil conditions and plan for long-term forest recovery

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Forest Infrastructure Development

Infrastructure Services

Forestry mulching and prescribed burning to manage the understory

- Use mulching to clear underbrush and prepare sites for reforestation or wildlife habitat improvement
- Implement prescribed burning to reduce fuel loads, control invasive species, and promote native vegetation

Construction of roads, culverts, bridges, and trails

- Design and build access roads, culverts, and bridges to support logging operations and forest management activities
- Develop trails for recreational use, ensuring minimal environmental impact and long-term sustainability

Developing food plots, slash walls, and deer fences

- Establish food plots to enhance wildlife habitats and support game species
- Construct slash walls and deer fences to protect young trees from browsing and improve regeneration success

Compensation

Pay Structures for Consulting Foresters

Hourly rates: Grant writing, management plan development

- Charges based on time spent on detailed, often complex tasks like writing grants or developing custom management plans
- Provides flexibility for projects where the scope may change or evolve over time

Daily rates: Timber cruising, marking, construction projects

- Flat daily fees for fieldwork-intensive activities, ensuring predictable costs for extended on-site tasks
- Ideal for projects that require a full day's commitment, such as timber cruising or overseeing construction work

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Compensation

Pay Structures for Consulting Foresters

Per acre/point rates: TSI, herbicide application, timber cruising

- Charges tied to the size of the area being managed, allowing for scalable pricing based on project scope
- Common for tasks like Timber Stand Improvement (TSI) or large-scale herbicide applications

Commission-based: Timber sales (% of sale value or $/mbf)

- Compensation linked directly to the financial success of timber sales, aligning forester incentives with maximizing client revenue
- Often used for high-value or large-volume sales where results directly impact the forester's earnings

Flat fees: Various projects across all service categories

- Set fees for specific, well-defined projects, providing clarity and predictability for both the forester and the client
- Useful for routine or standard services where the scope and effort required are consistent

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Consulting Foresters

In Summary, consulting foresters ultimately provide:

Comprehensive management of all aspects of forest stewardship

- Expertise in a wide range of forestry services, from management planning to timber sales and reforestation
- Ability to address complex challenges and ensure long-term health and productivity of forest resources

Tailored services to meet the unique needs of each landowner

- Customized solutions that align with the specific goals and priorities of each client
- Flexibility to adapt management strategies as conditions and objectives evolve over time

What can a consulting forester do for you?

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Questions?

Thank you for attending.

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