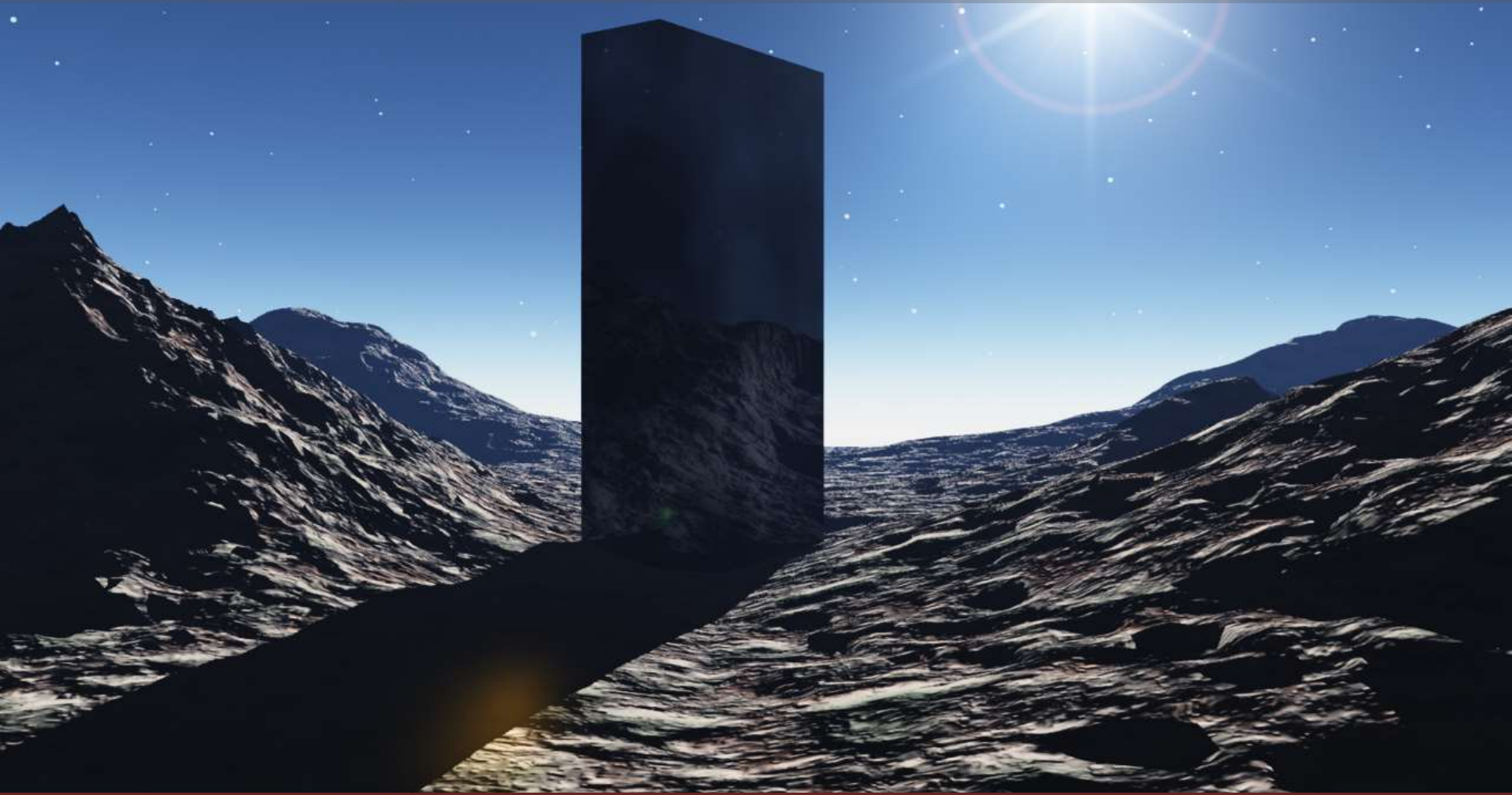


Adoption and the Human Factor



John Munsell

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Adoption and the Human Factor

Everybody loves progress but nobody likes change

From fortune cookie opened in Blacksburg 9/9/13

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Silvopasture

Unique and Complex Set of Considerations
Landowners, Resource Professionals, Policy Makers and Funders



Silvopasture

Unique and Complex Set of Considerations
Landowners, Resource Professionals, Policy Makers and Funders

Focus primarily on landowners and adoption
But also the role of professionals

What we know and is underway

what landowners know and need;
how professionals can help those that are interested or have adopted; and
what is happening presently in Virginia and beyond

Awareness and interest
Perceived benefits and challenges
Needs of adopters and potential adopters
Initiatives

Agroforestry?

Silvopasture?
Forest Farming?
Alley Cropping? etc.



Awareness is low

Landowners, agricultural specialists, foresters, policy-makers, and so on
(Williams et al. 1997; Lassoie and Buck 2000)

In the South, silvopasture falls out in middle to bottom in terms of understanding and practice (Workman et al. 2004)

However! 40% are interested in learning more and it tends to be one of the more commonly referenced agroforestry practices

Agroforestry Basic Science

Notable progress in temperate systems in the past 20 years
Production and conservation

Awareness and adoption are some of the biggest hurdles
5% target – matching the practice to the practitioner
More research needed

Landowners

Who is interested and why?

What do they think?

What do they need?



Less Interested (Arbuckle et al. 2009)

absentee owners

non-operators

older farmers

tenant farmers

More interested (Raedeke 2003; Workman et al. 2005)

multiple objective owners

new producers

intergenerational forest grazers

Landowners

Who is interested and why?

What do they think?

What do they need?



Why? (Workman and Nair 2002; Arbuckle et al. 2009)

Another income stream compatible with livestock

More completely utilize fertilizer inputs and reduce nutrient losses

Avoid regulation for non-point source pollution

Adding small animals to diversified systems (Workman and Nair 2002)

Aesthetics and wildlife

Forestry experience

Landowners

Who is interested and why?

What do they think?

What do they need?



Stewardship and satisfaction prized as a strength, followed by diversification of income and risk reduction (Srestha et al. 2004)

Opportunities

wildlife and environmental conservation (Workman and Nair 2002)

farm buffer

long-term income

Challenges

soil quality and regulation (Srestha et al. 2004)

complexity and infrastructure

culture and time

Landowners

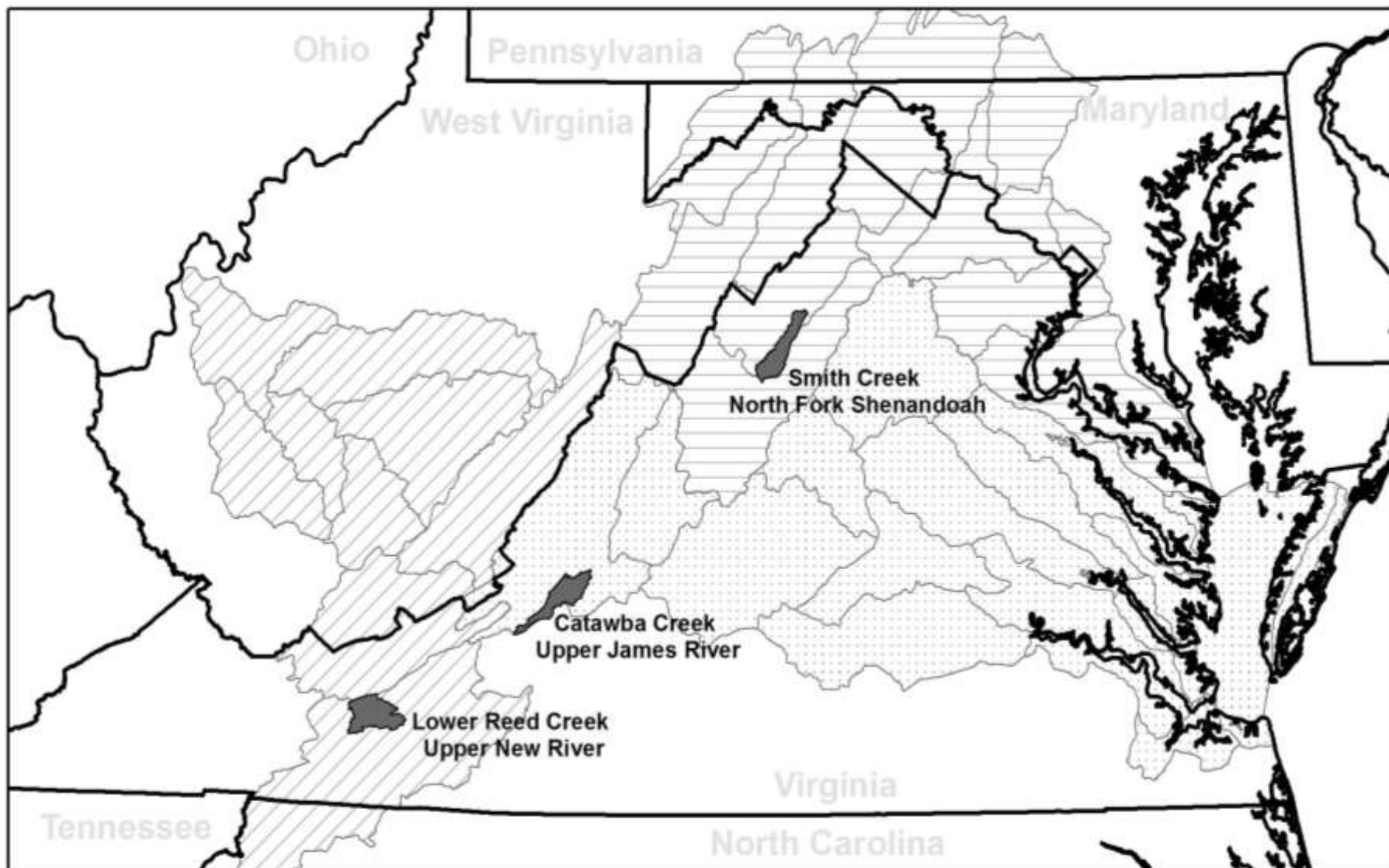
Who is interested and why?

What do they think?

What do they need?



Recent study in VA found perceived risk to be the most influential factor driving interest in agroforestry systems (Trozzo et al. in press)



Study Area Watersheds

0 15 30 60 90 120 Miles

- Kanawha
- Potomac
- Lower Chesapeake

Study Area Watersheds



Created by: Katie Trozzo
Date: 4/25/2013
Data Source: National Atlas & USGS

Landowners

Who is interested and why?

What do they think?

What do they need?



Recent study in VA found perceived risk to be the most influential factor driving interest in agroforestry systems (Trozzo et al. in press)

Livestock operators more likely to emphasize production objectives in terms of “making the case”

Were not altogether averse to the idea of using trees

Made it clear they are keen on understanding the costs and benefits

Landowners

Who is interested and why?

What do they think?

What do they need?



Potential Adopters

Know something

Awareness

How-to

Principles

Landowners

Who is interested and why?

What do they think?

What do they need?



Potential Adopters

Have a reason

Relative advantage

Compatibility

Complexity

Triability

Observability

Landowners

Who is interested and why?

What do they think?

What do they need?



Adopters

Have a reason to stick with it

Payoffs and markets

Adaptation and consistent technical support

Sense of relevance

Landowners

Who is interested and why?

What do they think?

What do they need?



Requests and Ideas

(Workman et al. 2004; Arbuckle et al. 2009; Cubbage et al. 2012; Jacobson and Karr 2013)

Demonstrations

Active training

Budget examples

Interaction with resource professionals

Peer-to-peer education

Networking

Professionals



Need to know more also

(Workman et al. 2005)

Only just over half even recognized the term

Impacts potentially big but many programs are just starting

(Jacobson and Karr 2013)

Not many states with active Extension and private or public consulting

Old adage holds true, the right fit is still influenced by contact

Initiatives




Initiatives

Drivers are diverse globally
(Cubbage et al. 2012)

Benefits and fit are possible

USDA
United States
Department of
Agriculture
June 2011

**USDA Agroforestry
Strategic Framework,
Fiscal Year 2011–2016**



Enriching Our Lives With Trees That Work

http://www.usda.gov/documents/AFStratFrame_FINAL-Ir_6-3-11.pdf

Questions?

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