

Appendix A: Variables Considered in Decision Tree Analysis

Label	Description	Units/Values/Notes	Base Data Source
ALL SV RICHNESS	Combined native and non-native woody stem shrub and vine species	Count, species per stand	Ecological Field Data
ALL TREE RICHNESS	Richness, overstory and understory tree species	Count, species per stand	Ecological Field Data
AVERAGE AGE	Average age of stand	Years	Ecological Field Data
AVERAGE DBH	Average DBH all overstory tree species	Inches†	Ecological Field Data
BIOMASS	Dimensional weight in tons	U. S. Tons†	Ecological Field Data
MAXIMUM DBH	Maximum DBH at site	Inches†	Ecological Field Data
NN RICHNESS	Non-native woody stem shrub and vine species richness	Count, species per stand	Ecological Field Data
NO. COVER TYPES	Number of cover types	Count per stand	Ecological Field Data
NSV RICHNESS	Native shrub and vine richness	Count, species per stand	Ecological Field Data
OAKINESS	Gradient <i>Quercus</i> to <i>Pinus</i> species abundance	Factor Score Principal Component 2, Dimensionless	Ecological Field Data/Land Cover Mapping
OVERSTORY TREE RICHNESS	Overstory tree richness	Count, species per stand	Ecological Field Data
REGENERATION	Forest regeneration type	1= Natural 2=Plantation	Ecological Field Data
TOTAL VALUE	Market value as of 12/2011	USD (\$)	Ecological Field Data
TOTAL STEMS	Number of trees > 12.7cm DBH	Count	Ecological Field Data
TOTAL FOREST AREA	Combined forest area per participant	Hectare	Ecological Field Data
AGE	Age of woodland owner	Years	Revealed Preference Survey
AESTHETIC	Q35A. I value wooded lands because...I enjoy scenery, sights, smells, etc.	Likert-type scale (even interval 1-5, N/A)	Revealed Preference Survey
ATTACHMENT	Q34: How important is your attachment to your wooded lands?	Likert-type scale (even interval 1-5, N/A)	Revealed Preference Survey
BIODIVERSITY	Q35E. I value wooded lands because... they provide a variety of fish, wildlife, plant life, etc.	Likert-type scale (even interval 1-5, N/A)	Revealed Preference Survey

Label	Description	Units/Values/Notes	Base Data Source
CONCERNS: "FREEDOM"	Q24. "How concerned are you about issues that may affect your use and enjoyment of your wooded land?"	Factor Score Principal Component 1, Dimensionless	Revealed Preference Survey
CONCERNS: "STABILITY"	Q24. "How concerned are you about issues that may affect your use and enjoyment of your wooded land?"	Factor Score Principal Component 2, Dimensionless	Revealed Preference Survey
CONNECTION TO NATURE	Q 36. Rate level of agreement: "Nature is part of me", "I get greater satisfaction visiting nature...", "...my life organized around enjoying nature..."	Factor Score Principal Component 1, Dimensionless	Revealed Preference Survey
ECONOMIC	Q35B. I value wooded lands because...they provide timber, fisheries, minerals, or tourism opportunities, such as outfitting and guiding.	Likert-type scale (even interval 1-5, N/A)	Revealed Preference Survey
HISTORICAL	Q35G. I value wooded lands because... they have places and things of natural and human history that matter to me, others, or the nation.	Likert-type scale (even interval 1-5, N/A)	Revealed Preference Survey
INCOME	Q45. "What was your household's annual income for 2010?"	Ordinal Categories 1-8	Revealed Preference Survey
INVESTMENT	Q8D. "Hold it as an investment?"	0= No 1= Yes	Revealed Preference Survey
LAND VISITATION INDEX	Q10. "Over the past 12 months, about how many days have you • been on this wooded land? • seen this wooded land?"	On = 1 per day Seen = 0.5 per day Living on land = 1.5 per day Max score = 547	Revealed Preference Survey
LEGACY	Q35I. I value wooded lands because... they are a place for me to continue and pass down the wisdom and knowledge, traditions, and way of life of my ancestors.	Likert-type scale (even interval 1-5, N/A)	Revealed Preference Survey
LIFE SUPPORT	Q35D. I value wooded lands because...they help produce, preserve, clean, and renew air, soil, and water.	Likert-type scale (even interval 1-5, N/A)	Revealed Preference Survey
LOSS OF RURAL CHARACTER	Q25. "In your opinion, how soon will the area near your wooded land lose its rural character due to development?"	Ordinal Categories 1-8	Revealed Preference Survey
MANAGEMENT	Aggregate:Q9. What management activities have been conducted on your wooded land with the last five years?	Yes = Actively managed; No = Passive management	Revealed Preference Survey
PRESENT USE VALUE	Q15. "Is your land in the State's Present-Use Value	0= No	Revealed Preference Survey

Label	Description	Units/Values/Notes	Base Data Source
	Program”	1= Yes 2= Don’t know/Unsure	
RECREATION	Q35C. I value wooded lands because...they provide a place for my favorite outdoor recreation activities.	Likert-type scale (even interval 1-5, N/A)	Revealed Preference Survey
REVENUE	Q8E. “Generate income from it?”	0= No 1= Yes	Revealed Preference Survey
SENSE OF PLACE: ATTACHMENT	Q37. Rate level of agreement: “I feel relaxed on my wooded land”, “I feel happiest when I’m on my wooded land”, “My wooded land is my favorite place...”	Factor Score Principal Component 1, Dimensionless	Revealed Preference Survey
SENSE OF PLACE: ATTITUDES ABOUT DEVELOPMENT	Q37. Rate level of agreement: “Too much development near my wooded land will harm wildlife habitat”, “Too much development near my wooded land will harm the natural character...”, “Too much development near my wooded land will make the area less scenic”	Factor Score Principal Component 1, Dimensionless	Revealed Preference Survey
SENSE OF PLACE: ATTITUDES ABOUT RETAINING NATIVE VEGETATION	Q37. Rate level of agreement: “I like to keep my wooded land as natural as possible”, “I don’t like to disturb native vegetation on my wooded land”, “I like to have a lot of natural vegetation on my wooded land”	Factor Score Principal Component 1, Dimensionless; negative worded items inversely coded	Revealed Preference Survey
SENSE OF PLACE: ATTITUDE S ABOUT WOODLAND	Q37. Rate level of agreement: “The wooded land is the most important reason for owning and visiting my property”, “Being near the woods is the best thing about my property”, “The property would still mean a lot to me even if it were not wooded”	Factor Score Principal Component 1, Dimensionless; negative worded items inversely coded	Revealed Preference Survey
SENSE OF PLACE: DEPENDENCY	Q37. Rate level of agreement: “My wooded land is the best place for doing the things I enjoy most”, “...no other place can compare to my wooded land”, “My wooded land is not a good place to do the things I like most”, “...there are better places to be than on my wooded land”	Factor Score Principal Component 1, Dimensionless; negative worded items inversely coded	Revealed Preference Survey
SENSE OF PLACE: IDENTITY	Q37. Rate level of agreement: “my wooded land a reflection of me”, “wooded land says very little about who I am”, “I can really be myself on my wooded land.”	Factor Score Principal Component 1, Dimensionless; negative worded items inversely coded‡	Revealed Preference Survey
SPIRITUAL	Q35F. I value wooded lands because... they are	Likert-type scale (even	Revealed Preference Survey

Label	Description	Units/Values/Notes	Base Data Source
	sacred, religious, or spiritually special places to me or I feel reverence and respect for nature there.	interval 1-5, N/A)	
TENURE	Years of ownership	Years	Revealed Preference Survey
THERAPEUTIC	Q35H. I value wooded lands because... they make me feel better, physically and/or mentally.	Likert-type scale (even interval 1-5, N/A)	Revealed Preference Survey
WILLING TO SELL	Aggregate: Q19. What is “your vision for the wooded land twelve months from now?” Q26. “Is your land currently for sale?” Q33. “Would you sell this land today if someone offered you the price you estimated...”	0= No 1=Yes	Revealed Preference Survey
CANOPY	Relative canopy coverage per stand	0= None (clear cut) 1= Partial 2= Full	Remote Sensing
DEVELOPMENT PRESSURE	“Pressure” development 2011: see equation (1).	Dimensionless, 2 km ² window centered on stand	Remote Sensing/Land Cover Mapping
DISTANCE TO CBD	Minimum Euclidean distance to Charlotte’s central business district	Meters	Remote Sensing/Land Cover Mapping
FARM PRESSURE	“Pressure” farms 2011: see equation (1).	Dimensionless, 2 km ² window centered on stand	Remote Sensing/Land Cover Mapping
MOMENTUM 1996 TO 2006	“Pressure” new development 1996-2006: see equation (1).	Dimensionless, 2 km ² window centered on stand	Remote Sensing/Land Cover Mapping
MOMENTUM 2006 TO 2011	“Pressure” new development 2006-2011: see equation (1).	Dimensionless, 2 km ² window centered on stand	Remote Sensing/Land Cover Mapping
MOMENTUM 1996 TO 2011	“Pressure” new development 1996-2011: see equation (1).	Dimensionless, 2 km ² window centered on stand	Remote Sensing/Land Cover Mapping

† Units in English as specified by USDA Forest Service (1996) protocol.

‡ Jorgenson and Stedman, 2006