Rubric for the Evaluation of Stillinger Proposals

Student Name: _____

Evaluator Name: _____

Definition, science of forest ecology and areas appropriate to the C.R. Stillinger Forest Science Research Fellowship:
The study of organisms in their environment in tree-dominated ecosystems. Forest ecology examines patterns and processes of flora, fauna and abiotic factors at multiple hierarchical levels, including the organismal, population, community and ecosystem levels. Although trees are central to the forest ecosystem, there is a diverse array of biotic (e.g., plans, animals, fungi, microorganism) and abiotic (e.g., soils, nutrients, hydrology) components that are important to understand in forest ecology.

Dimensions	Exemplary	Accomplished	Developing	Beginning
Introduction, Background and Purpose *Introduction clearly explains how the science of forest ecology will be advanced* *Purpose statement* *Appropriate research question(s) format*	• Introduction is inviting and draws in the reader and clearly describes the proposed project. • Research question(s) is/are clear and can be investigated. • Research question(s) are operationalized in a commonly used format of objectives, hypotheses, etc.	• Introduction is inviting and draws in the reader, but only somewhat clearly describes the proposed project. • Research question(s) is/are somewhat clear, and can likely be investigated. • Research question(s) are operationalized in a commonly used format of objectives, hypotheses, etc.	• Introduction is not inviting and does not clearly describe the proposed project. • Research question(s) is/are somewhat clear, seem difficult to investigate as written, and are not in a commonly used format. • Research question(s) are operationalized in a commonly used format of objectives, hypotheses, etc.	• Introduction does little to draw in the reader and set the stage for the proposed project. • Research question(s) is/ are unclear, and probably cannot be investigated. • Research question(s) are not operationalized in a commonly used format of objectives, hypotheses, etc.
Justification and Importance	• Justification is logical and well supported by up-to-date citations. • Relevance to advancing the science of forest ecology is clearly justified. • Impact to the field is likely to be high.	• Justification is somewhat logical and somewhat supported by citations. • Relevance to advancing the science of forest ecology is only somewhat justified. • Impact to the field is likely to be moderate.	• Justification is not well developed or the citations selected to support it are not adequate. • Relevance to advancing the science of forest ecology is barely justified. • Impact to the field is likely to be marginal	• Justification is poorly developed and not supported by citations. • Relevance to advancing the science of forest ecology is not justified. • Impact to the field cannot be determined
Theoretical and Critical Concepts *Paradigm* *Theory* *Conceptual Model* *Literature to justify*	• Overall conceptual strategy is clear and cohesive. It is obvious PI understands the differences and connections among the following ideas: paradigm, theory and conceptual models. • PI's use of theoretical structures is clear and well justified via a thorough use of literature and the inclusion of existing empirical evidence.	• Overall conceptual strategy is relativity clear and mostly fits together. It is obvious PI understands the differences and connections among most of the following ideas: paradigm, theory and conceptual models. • PI's use of theoretical structures is only somewhat clear and not well developed or justified.	• Overall conceptual strategy is somewhat clear and only parts fit together. It is obvious PI understands some of the differences and connections among most of the following ideas: paradigm, theory and conceptual models. • PI's use of theoretical structures lack clarity and they are not well developed or justified.	• Overall conceptual strategy does not fit together. It is obvious PI doesn't understand the differences and connections among most of the following ideas: paradigm, theory and conceptual models. • PI's use of theoretical structures is unclear nor are they justified.
Methodology/Design *Logic* *Accepted steps or protocols* *Use of literature*	• The logic behind PI's choice of methodology/ design is clearly synthesized and its appropriateness for the proposed research is well developed. • The steps outlined are documented using literature and integrated into the proposed research, or they are a creative adaptation of established protocol.	• The logic behind PI's choice of methodology/ design is logically explained and appropriate for the proposed research. • The steps outlined are documented using literature and presented in relation to the proposed research, or they are an adaptation of established protocol.	• The logic behind PI's choice of methodology/ design is briefly described, yet appropriate for the proposed research. • The steps outlined are mostly described with little effort to directly connect them to the proposed research. If and when things are adapted they are often not well thought out.	• The logic behind PI's choice of methodology/ design is unclear and little or no evidence is provided as to why it is appropriate for the proposed research. • The steps outlined are not documented nor clearly understood based on material provided. If and when things are adapted it does not seem to be recognized, and little or no reasoning is presented.

Rubric for the Evaluation of Stillinger Proposals

Student Name: _____

Evaluator Name: _____

Dimensions	Exemplary	Accomplished	Developing	Beginning
Data Methods/ Procedures *Collection/Generation* *Database Creation Logical* *Analysis/Coding* *Accepted or creative approaches* *Use of literature*	• Data methods/ procedures are explained at a level which would allow another researcher to easily apply nearly all of them. • Literature and relevant studies are employed to detail procedures and justify all choices (collection, data generation, analysis/ coding, writing as analysis, etc.).	• Data methods/procedures are explained at a level which would allow another researcher to easily apply many of them. • Literature and relevant studies are employed to detail procedures and justify some choices (collection, data generation, analysis/coding, writing as analysis, etc.).	• Data methods/procedures are named, but not adequately explained at a level which would allow another researcher to easily apply most of them. • Little or no literature and relevant studies are used to detail procedures and justify choices (collection, data generation, analysis, etc.).	• Data methods/ procedures selected do not obviously fit the methodology/design selected. • The lack of ability to explain how things would be done as well as the absence of literature and relevant studies justifying choices suggest limited understanding of how to carry out methods and procedures.
Data Quality Assurances *Aspects of design/ methodology* *Aspects of methods/ procedure* *Aspects of ethical issues* *Use of literature*	• Standard aspects for quality assurances related to: (1) design and methodology structures, (2) selected methods and procedures, and (3) ethical issues are integrated into the proposed research. • Literature is cited to defend positions presented.	• Standard aspects for quality assurances for at least two of the three: (1) design and methodology structures, (2) selected methods and procedures, and (3) ethical issues are somewhat integrated into the proposed research. • Literature is cited to defend positions presented.	• Standard aspects for quality assurances for at least two of the three: (1) design and methodology structures, (2) selected methods and procedures, and (3) ethical issues are simply described but not directly linked into the proposed research. • Literature is sometimes cited to defend positions presented.	• Standard aspects for quality assurances for at least two of the three: (1) design and methodology structures, (2) selected methods and procedures, and (3) ethical issues only are described but not directly linked into the proposed research. • Literature is usually not cited to defend positions presented.
Project Action Plan *Tasks* *Timeline* *Budget* *Outputs, products, outcomes*	Relatively complete information is provided that accurately details: (1) tasks to be completed, (2) a realistic timeline, (3) budget considerations, and (4) outputs, proposed products, and likely outcomes.	Substantial information is provided that details: (1) tasks to be completed, (2) a realistic timeline, (3) budget considerations, and (4) outputs, proposed products, and likely outcomes. In some cases, the information provided is unrealistic.	Some information is provided that details at least three of the four items that follow: (1) tasks to be completed, (2) a realistic timeline, (3) budget considerations, and (4) outputs, proposed products, and likely outcomes.	Little or no information is provided that accurately details: (1) tasks to be completed, (2) a realistic timeline, (3) budget considerations, and (4) outputs, proposed products, and likely outcomes.
Grammar, Format *Effective use of headings, sections, paragraphs, topic sentence, etc.* *Specialized terminology used correctly* *Punctuation accurate and guides the reader* *Voice and style are consistent* *Spelling* *Appropriate use of citations and citation format*	• Formatting is clearly used to make the proposal easy to read, and to follow the sequencing of ideas. • Specialized terminology is used correctly. • Punctuation is mostly accurate and guides the reader. • Voice and style are mostly consistent. • Almost no spelling errors • Citations are used appropriately and the formatting always follows a recognized style.	• Formatting is often used to make the proposal easy to read, and to follow the sequencing of ideas. • Specialized terminology is generally used correctly. • Punctuation is somewhat accurate and guides the reader. • Voice and style are mostly consistent. • A few spelling errors • Citations are generally used appropriately and the formatting most often follows a recognized style.	• Formatting is sometimes used to make the proposal easy to read, and to follow the sequencing of ideas. • Specialized terminology is sometimes misused. • Punctuation is irregular and a reoccurring problem. • Voice and style are somewhat consistent. • Many spelling errors • Citations are often used inappropriately or the formatting often varies from the recognized style.	• It is not apparent how formatting was used to make the document easy for readers to follow. • Specialized terminology is frequently misused. • Punctuation is unacceptable. • Voice and style are inconsistent. • The number of spelling errors is an obvious detraction for a reader. • Citations are used inappropriately and the formatting varies from the recognized style.

Comments (if any):