Rating Sheet 1

Overall Assessment of Intellectual Merit: Very Good
Explanation to the applicant:
Intellectual Merit: Very Good The applicant demonstrated excellent academic performance and potential to succeed in graduate school and conduct original research. As an undergraduate she has accumulated broad and extensive research experiences: including field work in Ecuador and Malaysia, and genomics and bioinformatics research. As a result of her intense research experience she has 3 1st author publications. Her proposed project is to develop computational tools to quantify the effects of anthropogenic disturbances on biodiversity, as part of the project she will create an easy-to-use online management tool that will help land management and conservation. She already has good computational skills and in the next few year will pursue further quantitative, statistical and modeling training.
Overall Assessment of Broader Impacts: Very Good
Explanation to the applicant:
Broader Impacts:Very Good The applicant has a diverse background and is currently mentoring 3 female underrepresented undergraduates. As part of her commitment to conservation issues she has connections with one of the largest timber producers that will allow her to further educate and disseminate her work.

Rating Sheet 2

Overall Assessment of Intellectual Merit: Excellent
Explanation to the applicant:
The applicant's research has led to an impressive three publications and several presentations. Academic performance indicators, reference letters and a Goldwater fellow all speak to an exceptional applicant.
Overall Assessment of Broader Impacts: Excellent
Explanation to the applicant:
The applicant had to overcome familial role model issues to attend graduate school. She has been an undergraduate TA and worked in the writing center to instruct freshmen students struggling with writing issues. Important in this latter work is the time commitment to one-on-one work with under-represented groups.

Rating Sheet 3

Overall Assessment of Intellectual Merit: Excellent
Explanation to the applicant:
The applicant has an outstanding record of academic achievement and has demonstrated very strong research productivity as an undergraduate. This has led to several publications and presentations strongly suggesting that the applicant will continue with her research productivity. Her proposed research is a marked shift from her previous work in bioinformatics but the quantitative skills she has developed will

serve her well in this capacity. The work proposed is one of the few I have seen that meaningfully combine phylogenetic approaches and community ecological data thereby informing broader areas of science.

Overall Assessment of Broader Impacts: Very Good

Explanation to the applicant:

The applicant has a history of outreach to underserved populations and tutoring in both writing and science. Her proposed research has the potential to enhance scientific understanding among other disciplines as well as provide material for continued outreach and broadening understanding of science in the general population including landowners who have a vested interest in the biological diversity on their properties and how such diversity is managed.