**Statement of Intent**

**140 words**

A critical barrier to successful sustainable development is quantifying biodiversity loss in an economically meaningful way. Such an exercise is crucial for minimizing the ecological footprint of economic activity. Our project aim to fill this gap by benchmarking the recreational value of biodiversity in developed and developing countries using Minnesota and India as case studies. A comparative analysis will deepen our understanding of the institutional factors that shape biodiversity valuation. Our methodology relies on integrating an economic model of recreation demand with millions of citizen science observations from a birdwatching app to elicit the implicit price people pay for biodiversity. Our team of economists, ecologists, and [community partner] draws cross-disciplinary insights to broaden our understanding of ecological loss that is not measured by markets. In doing so, our research can provide holistic policy evaluation of sustainable development strategies in Minnesota and abroad.

**100 words**

A major barrier to sustainable development is quantifying biodiversity loss in economic terms. Our goal is to bring together economists, ecologists, and conservation practitioners to benchmark this metric in developed and developing country contexts, using Minnesota and India as case studies. By integrating a model of recreation demand with data from a popular birdwatching app, we will use travel costs to estimate an implicit price of biodiversity not captured by markets. Our team of economists and ecologists from NatCap TEEMS alongside community partners from [INSERT] can then use this metric to evaluate the ecological feasibility of economic development initiatives in Minnesota and beyond.

A major barrier to sustainable development is the difficulty of quantifying biodiversity loss in economic terms. Valuing species is crucial for understanding the human welfare impacts of ecological degradation. Our project addresses this gap by estimating the recreational value of biodiversity in India, a global biodiversity hotspot. Using over 3 million birdwatching trips from a popular mobile app, we will apply advances in travel cost modeling to reveal the implicit price people are willing to pay to experience biodiversity. Though based at the University of Minnesota, our team is part of NatCap TEEMS, a global, interdisciplinary network of economists, ecologists, and remote sensing scientists. The outcome will be a practical, replicable tool for biodiversity valuation---one that can also guide conservation efforts locally in Minnesota. This project supports the IonE impact goal of building a sustainable future by developing new methods to measure and value natural capital.