

Sabbatical Report
Dr. Rheyne Laney
Sabbatical Period: Fall 2017/Spring 2018

I worked on five projects. Two were research papers, both of which are final products in a research project that I began back in 2006 on wildlife-friendly farming.

1. Paper 1: The Adoption of Wildlife Practices through a Payments-for-Environmental-Services (PES) Agri-Environmental Scheme

Abstract

This study examines the adoption of wildlife practices through the Conservation Security Program (CSP), one of the first PES-style agri-environmental schemes in the United States. It investigates whether, in California's Northern Sacramento Valley, participation and adoption decisions are best explained by scheme factors, such as eligibility requirements and payment structures, or by socio-cultural factors, such as growers' conservation values and their personal interest in wildlife. Results confirm previous research establishing that, in the case of best management practices (BMPs) with clear productive advantages, fiscal rewards alone can expand participation and adoption. In the case of wildlife practices, however, those rewards are essential but insufficient. Non-economic, socio-cultural motivations are critical as well. Two intrinsic motivations supported wildlife adoption in this case: a desire to help maintain farming as a livelihood; and a sense of identity as hunters. The former ag advocacy motivation is similar to those that support conventional BMP adoption (e.g. stewardship). The latter hunting motivation is distinctly different, pointing to a personal connection between the grower and the targeted wildlife. These findings support a modification to the literature's conservation-adoption framework to account for the wildlife case.

I spent the Fall 2017 finishing a draft of this paper. I sent it out for review in Spring 2018. It is still in review for the journal: *Human Dimensions of Wildlife*

2. Paper 2: The cost-effectiveness of on-field, targeted, PES-style agri-environmental schemes in support of wildlife habitat

Abstract

This study assesses the effectiveness of four payments-for-environmental-services (PES) projects promoting shorebird habitat on working-rice lands in Northern California's Sacramento Valley. Using remotely-sensed imagery and other data, the study clarifies when and why a shortfall in shallow flooding on rice fields develops in the late winter season, and determines whether PES helped to reduce that deficit. Results reveal that the habitat gap's initial emergence is highly dynamic, fluctuating between mid-February and mid-March, depending on weather conditions. As well, the underlying cause of the gap changes within that time-period. In late February, flooding is relatively compatible with rice management, but irrigation water is unaffordable in dry weather. In March, flooding becomes highly competitive with rice management under any weather condition. Under these rapidly changing circumstances, some PES payments successfully induced more flooding and reduced the habitat gap. Many, however, did not target the right problem at the right time, which forfeited substantial cost-efficiency. After the projects end, former participants do not intend to maintain flooding when it is needed most, confirming the need for long-term PES-style support. Future projects should respond more flexibly to changing weather conditions, be more parsimonious in support of February floods, and shift more resources toward March floods, when the habitat deficit become especially acute and the tradeoffs between rice management and shorebird needs become especially challenging.

I spent the Fall 2017 and Spring 2018 producing additional data for this paper. Most of that work focused on developing the 50+ flood-cover maps upon which most of the data analysis in this

paper is based. By the end of the sabbatical, that part of the project was complete. This paper will be submitted to *Biodiversity and Conservation* in Fall 2019

The next three projects were part of my new research initiative to produce educational video on Human Geography for AP high school and lower-division college-level courses.

3. Video 1: **Sexuality and the City: Gentrification of the Castro in San Francisco**

I started this video project in 2016. The video takes a historical look at the rise of the Castro, and the district's economic and political importance to the gay community. It then examines two opposing theses that attempt to explain why it is currently in decline. The video then explores the implication of that decline and potential pathways forward.

This video incorporates hundreds of historical and contemporary photographs that are owned by many different artists. I used a significant portion of my sabbatical time tracking down the owners of these photographs and asking them for permission to use them in the video.

4. Video 2: **Global economic inequality through the lens of core-periphery**

This is an animated video that presents a broad take on global inequality through the lens of the core-periphery model. This model is introduced in AP and lower-division Human Geography courses.

I spent several months developing the audio script for this video and producing the basic animations. This video is about $\frac{3}{4}$ complete.

5. RSCAP Grant: **The urban social geography of Istanbul, Turkey**

In Spring 2018, I spent a month doing background research for a RSCAP grant on the historical urban social geography of Istanbul. The field of urban social geography is significant component of AP and lower-division Human Geography courses. This video presents several key concepts within that curriculum through a case study on Istanbul.

In late Spring 2018, I received this RSCAP award. The plan was to conduct the video shoots during that following Summer of 2018. But, I was not give permission to travel that summer. So instead, SSU allowed me to use the money to pay for the copyright permissions for the Castro video described above