

## **Purposeful Gaming**

Purposeful Gaming and BHL: engaging the public in improving and enhancing access to digital texts, aka

Purposeful Gaming, is a project whose goal is to improve searching and retrievability of digitized texts from the

Biodiversity Heritage Library (BHL). Historic literature, field notebooks, and horticultural catalogs are all types of
textual content within BHL that present problems for interpretation via OCR software. This project will demonstrate
whether or not digital games are a successful tool for analyzing and improving digital outputs from OCR and
transcription activities because large numbers of users can be harnessed quickly and efficiently to focus on the review
and correction of particularly problematic words by being presented the task as a game.

The primary objectives include: 1) digitizing horticultural catalogs; 2) transcribing field notebooks and catalogs; 3) building the technical framework for managing multiple OCR outputs, 4) comparing digital outputs for accuracy and extracting problematic words for a game; 5) developing and deploying a game to crowdsource problematic text; 6) evaluating accuracy scores from the game

### **Timeline**

December 2013-November 2015

#### **Deliverables**

- 93,000 digitized pages of horticultural catalogs in BHL minimum of 2 OCR outputs for each page (Mar 2015)
- Implementation of a tool for transcribing hand-written and multi-column formatted BHL content (May 2014)
- 2,000 pages of transcribed field notebooks for renowned ornithologist William Brewster (Mar 2015)
- Technical framework within BHL architecture for classifying, comparing and managing multiple OCR outputs (Aug 2014)
- Production of an error matrix that will allow for automated text correction on full BHL corpus (Nov 2015)
- Proof of concept for whether gaming and crowdsourcing can be used to improve access to digital texts. (Nov 2015)

#### **Funder and Partners**

Funder: Institute of Museum and Library Services (\$449,641)

Partners: Missouri Botanical Garden (awardee); Harvard University, Cornell University, New York Botanical

Garden

# **Public Webpage**

http://biodivlib.wikispaces.com/Purposeful+Gaming