

# Video Club Teacher Guide: “Birds on the Brink” Video

## Overview

This *Wolbachia* Project Video Club contains three sections:

1. **Video Club** – Students will watch and critically discuss a *Wolbachia*-related video. Guided questions are provided to lead readers through each section of the video with an emphasis on ecology, evolution, and conservation.
2. **Graphical Abstract** – Students will create a graphical abstract to illustrate the video.
3. **Current Events** – Students will research the current status of *Wolbachia*-mediated mosquito management in Hawai’i.

## Connection with the Standards

The *Wolbachia* Project Video Club aligns with disciplinary core ideas from Next Generation Science Standards (NGSS) and AP Framework.

NGSS Disciplinary Core Ideas	
Ecosystems: Interactions, Energy, and Dynamics (HS-LS2) <ul style="list-style-type: none"> <li>• LS2.C: Ecosystem Dynamics, Functioning, and Resilience</li> </ul> Biological Evolution: Unity and Diversity (HS-LS4) <ul style="list-style-type: none"> <li>• LS4.A: Evidence of Common Ancestry and Diversity</li> <li>• LS4.B: Natural Selection</li> <li>• LS4.C: Adaptation</li> <li>• LS4.D: Biodiversity and Humans</li> <li>• ETS1.B: Developing Possible Solutions</li> </ul>	
AP Biology Framework	AP Environmental Science Framework
Natural Selection (Unit 7) <ul style="list-style-type: none"> <li>• 7.1: Introduction to Natural Selection</li> <li>• 7.2: Natural Selection</li> <li>• 7.10: Speciation</li> <li>• 7.11: Extinction</li> <li>• 7.12: Variations in Populations</li> </ul> Ecology (Unit 8) <ul style="list-style-type: none"> <li>• 8.5: Community Ecology</li> <li>• 8.6: Biodiversity</li> <li>• 8.7: Disruption to Ecosystems</li> </ul>	The Living World: Biodiversity (Unit 2) <ul style="list-style-type: none"> <li>• 2.1: Introduction to Biodiversity</li> <li>• 2.3: Island Biogeography</li> <li>• 2.5: Natural Disruptions to Ecosystems</li> <li>• 2.6: Adaptations</li> <li>• 2.7: Ecological Succession</li> </ul> Land and Water Use (Unit 5) <ul style="list-style-type: none"> <li>• 5.6: Pest Control Methods</li> <li>• 5.14: Integrated Pest Management</li> <li>• 5.17: Sustainable Forestry</li> </ul>

## Prerequisite Skills

No prerequisite skills are required for this activity. Familiarization with concepts in ecology, evolution, and conservation is recommended.

### Group Size

This activity can be performed in small groups (2-4 students) or as an individual project.

### Teaching Time

The entire activity will take approximately 2-3 class periods. Each activity is a stand-alone unit and may be completed independent of the other modules.

- Day 1 (full class period): Watch the video; work in groups to answer the Guided Questions
- Day 2 (full class period): Create a graphical abstract
- Days 3 (partial class period): Complete the Current Events activity

### Supplies

- **Video:** Access the video from Wild Hope or YouTube:
  - <https://www.wildhope.tv/episode/birds-on-the-brink/>
  - <https://www.youtube.com/watch?v=LXu4TSXXso>
- **Activity:** The activity is available in a PDF or Word document; it may be printed or viewed online.
  - <https://wolbachiproject.org/vc-birds-on-the-brink/>
- **Computer:** A computer is required to watch the video, research current events, and (optionally) create a graphical abstract. Students may use their preferred software for drafting abstracts including (but not limited to) Google Slides, PowerPoint, Adobe, Canva, and BioRender.
- **Paper and colored pencils (optional):** Alternatively, students may use paper and colored pencils to sketch a graphical abstract

### Disclaimer

The *Wolbachia* Project is not affiliated with the producers of this video.