

# Young Biodiversity Researchers Activity Sheet

## Researcher Identity Card

*Complete your research identity details before starting your investigation:*

Researcher Name: \_\_\_\_\_

Team Code: \_\_\_\_\_

Research Area: \_\_\_\_\_

Date: \_\_\_\_\_

## Initial Assessment

*Circle the correct answer for each question:*

### 1. Biodiversity refers to:

- ☐ Only animals
- ☐ Only plants
- ☐ All living organisms
- ☐ Only endangered species

### 2. The Shannon-Wiener index is used to measure:

- ☐ Population size
- ☐ Species diversity
- ☐ Habitat area
- ☐ Animal migration

### 3. Which factor does NOT directly affect biodiversity?

- ☐ Temperature
- ☐ Soil pH
- ☐ Radio waves
- ☐ Humidity



## Field Research Activities

## Area Mapping Exercise

*Draw a rough map of your study area in the grid below. Include:*

- Sampling points (mark with X)
- Major landscape features
- Compass directions
- Scale approximation

```
${Array(20).fill().map(() => ` `).join("")}
```

### Map Legend

# Biodiversity Recording Sheet

*Record all species observed in your study area:*

```
${Array(8).fill().map(() => ` `).join("")}
```

Species	Count	Location	Notes

Environmental Factors Analysis

Record and analyze environmental conditions at each sampling point:

```
${Array(5).fill().map((_, i) => ` `).join("")}
```

Sampling Point	Temperature (°C)	Humidity (%)	Soil pH	Light (lux)
Point ${i + 1}$				

Analysis Questions:

1. What patterns do you notice in the environmental data?  
  
\_\_\_\_\_
2. How might these factors affect biodiversity in your study area?  
  
\_\_\_\_\_
3. Which environmental factor seems to have the strongest influence on species distribution?  
  
\_\_\_\_\_

## Species Interaction Web

*Create a detailed interaction web showing relationships between observed species:*



### Relationship Key:

→ Predation

+ Mutualism

↔ Competition

∅ No interaction

## Interaction Analysis

1. Identify the most connected species in your web:

---

2. Explain why these connections are important:

---

Habitat Assessment Survey

Habitat Features	Present?	Condition (1-5)	Notes
Tree Canopy			
Understory Vegetation			
Ground Cover			
Water Sources			
Natural Shelters			

Overall Habitat Quality Score

PoorFairGoodExcellent

Positive Human Impacts

`\${Array(4).fill().map(() => ` `).join("`)}

Impact Type	Evidence	Effect on Biodiversity

Negative Human Impacts

`\${Array(4).fill().map(() => ` `).join("`)}

Impact Type	Evidence	Effect on Biodiversity

## Conservation Recommendations

### Short-term Actions (0-6 months)

#### Action 1:

---

#### Implementation steps:

---

#### Action 2:

---

#### Implementation steps:

---

### Long-term Actions (6+ months)

#### Action 1:

---

#### Implementation steps:

---

#### Action 2:

---

#### Implementation steps:

---



## Research Conclusions

### Key Findings

#### 1. Species Diversity:

---

#### 2. Habitat Quality:

---

#### 3. Environmental Factors:

---

#### 4. Human Impacts:

---

### Personal Reflection

What I learned about biodiversity research:

---

How this research can help protect local ecosystems:

---

Final Research Summary:

Key Findings:

1. Most significant observation:

2. Unexpected discoveries:

3. Suggestions for future research:

Teacher Assessment:

Criteria	Rating (1-5)	Comments
Data Collection		
Analysis		
Presentation		