



# Tropical Explorer School Program

## K-3 Grades Curriculum

The *Tropical Explorer School Program* is one of three plant-based education programs offered to school groups at Olbrich Botanical Gardens.

The primary goals of the *Tropical Explorer School Program* are:

- To introduce students to the basic characteristics of a tropical rainforest habitat through guided learning stations and tour of Bolz Conservatory.
- To provide students with an authentic learning experience involving inquiry-based and hands-on learning methodologies.
- To enrich classroom learning by supporting the Wisconsin Model Academic Standards and the Metropolitan Madison School District (MMSD) K-8 Science Standards.

### **INTRODUCTION & SAFETY**

Students are introduced to the *Tropical Explorer School Program*. Through visual examples, physical demonstrations, and models, students define the terms “habitat” and “adaptation.” Students also participate in defining safety protocols while on site.

- **Wisconsin Standards for Agriculture, Food, and Natural Resources:** NR 2.a.1.e
- **Wisconsin Model Early Learning Standards:** A.EL.2
- **Wisconsin’s Model Academic Standards for Environmental Education:** B.4.6
- **Wisconsin Standards for Health Education:** (PK-2) 1:1:A1, 1:1B2
- **Wisconsin State Standards for Literacy:** Speaking and Listening 1 (K-2), 2 (K-1), 3 (3-5)
- **Wisconsin Model Academic Standards for Science:** A.4.1, A.4.2, C.4.2, F.4.1, F.4.2
- **MMSD K-8 Science Standards:**
  - Kindergarten Life Sciences *Characteristics of Animals*
  - Grade 1 Life Sciences *Characteristics and Life Cycles of Plants*
  - Grade 3 Life Sciences *Structure & Response of Organisms*

### **LEARNING STATIONS**

#### **PRODUCTS FROM THE RAINFOREST**

This learning station highlights household items and groceries students are familiar with that contain products that come from a tropical rainforest.

- **Wisconsin Standards for Agriculture, Food, and Natural Resources:** BT2.f.6.e, FPP1.a.1.e, FPP4.b.2.e, FPP4.b.3.e, NR1.a.1.e, NR3.a.7.e, PS1.c.2.e, PS3.e.1.e
- **Wisconsin’s Model Academic Standards for Environmental Education:** A.4.1, A.4.2, A.4.3, A.4.4, B.4.8, B.4.10
- **Wisconsin State Standards for Literacy:** Speaking and Listening 1 (K-2), 2 (K-1), 6 (K-2), 3 (3-5)
- **Wisconsin Model Academic Standards for Science:** C.4.1, C.4.2, C.4.7, C.4.8, D.4.1, E.4.7, F.4.4, H.4.1, H.4.3
- **Wisconsin’s State Standards for Social Studies:** Economics D.4.3
- **MMSD K-8 Science Standards:**
  - Kindergarten Physical Science *Properties of Materials*

#### **PLANTS AND ANIMALS OF THE RAINFOREST**

This learning station provides students with tactile activities that illustrate the layers of a tropical rainforest and the animal life that lives in the different layers of a rainforest.

- **Wisconsin Standards for Agriculture, Food, and Natural Resources:** AS2.a.1e, BT2.f.4.e, NR1.b.3.e, PS1.d.2.e
- **Wisconsin’s Model Academic Standards for Environmental Education:** A.4.2, A.4.4, B.4.1, B.4.4, B.4.6



- **Wisconsin State Standards for Literacy:** Speaking and Listening 1 (K-2), 2 (K-1), 3 (3-5)
- **Wisconsin Model Academic Standards for Science:** C.4.1, C.4.2, F.4.1, F.4.2, F.4.4
- **MMSD K-8 Science Standards:**
  - Kindergarten Life Science *Characteristics of Animals*
  - Grade 1 Life Science *Characteristics and Life Cycles of Plants*
  - Grade 3 Life Science *Structure and Responses of Organisms*

#### **WHAT IS A TROPICAL RAINFOREST?**

This learning station focuses on identifying the basic characteristics of a tropical rainforest habitat by comparing and contrasting a tropical rainforest to a Wisconsin deciduous forest.

- **Wisconsin Model Academic Standards for Environmental Education:** A.4.1, A.4.2, A.4.3, A.4.4, B.4.1, B.4.4, B.4.5, B.4.6
- **Wisconsin State Standards for Literacy:** Speaking and Listening 1 (K-2), 2 (K-1), 3 (3-5)
- **Wisconsin Model Academic Standards for Science:** A.4.1, C.4.1, C.4.2, E.4.5, E.4.6, F.4.1, F.4.2, F.4.4
- **Wisconsin State Standards for Social Studies:** Geography A.4.1, A.4.2
- **MMSD K-8 Science Standards:**
  - Kindergarten Life Science *Characteristics of Animals*
  - Grade 1 Life Science *Characteristics and Life Cycles of Plants*
  - Grade 2 Earth Science *Properties of Air & Monitoring the Weather and Moon Phases*
  - Grade 3 Life Science *Structure and Responses of Organisms*

#### **GUIDED CONSERVATORY TOUR**

Students participate in a 30-minute guided tour and scavenger hunt through the Bolz Conservatory as part of the *Tropical Explorer School Program*. The tour provides students with a unique opportunity to engage their senses as they see, hear, feel, and smell a tropical rainforest habitat. During the tour students learn about plant adaptations, explore different layers of the rainforest, and search for rainforest animals.

- **Wisconsin Model Standards for Agriculture, Food, and Natural Resources:** AS6.a.1.e
- **Wisconsin Model Early Learning Standards:** C.EL.1, F.4.4, C.4.2
- **Wisconsin State Standards for Literacy:** Speaking and Listening 1 (K-2), 2 (K-1), 3 (3-5)
- **Wisconsin's Model Academic Standards for Physical Education:** Understanding Physical Activity and Well Being D.4.1; Respectful Behavior F.4.1, F.4.2
- **MMSD K-8 Science Standards:**
  - Kindergarten Life Sciences *Characteristics of Animals*
  - Grade 1 Life Sciences *Characteristics and Life Cycles of Plants*
  - Grade 3 Life Sciences *Structure & Response of Organisms*