

5th Grade
Watershed Stewards
Field Experience

Teacher Information Booklet



Nanjemoy Creek
Environmental Education Center
5300 Turkey Tayac Place
Nanjemoy Creek, MD 20662
Phone: 301-743-3526

Web Site: <http://www.ccboe.com/schools/nanjemoycreek/>



Nanjemoy Creek Environmental Education Center

5300 Turkey Tayac Place
Nanjemoy, Maryland 20662
301-743-3526
Email: temhoff@ccboe.com

Dear 5th Grade Teacher,

My staff and I are looking forward to your visit to Nanjemoy Creek Environmental Education Center (NCEEC). Your students will have an enjoyable educational experience, and it is my goal to make this a pleasant experience for you as well. The program goals for the 5th grade Environmental Education experience are:

- to meet the performance expectations of the Next Generation Science Standards (NGSS)
- to fulfill standards outlined in the CCRC in math and reading
- to fulfill the requirements of the State of Maryland's Environmental Literacy Standards
- to provide relevant, hands-on activities that maximize the use of the environment and extend classroom learning to outdoor, real-life situations
- to promote a strong environmental stewardship as directed by MSDE by increasing student awareness, imparting knowledge that they are a part of the environment and showing how their actions impact their environment and specifically, their watershed

Please take the time to read through all the information in this packet. In this booklet, you will find everything you need to plan a successful trip. The first step is to print all materials needed for the trip. All trip materials can be accessed at: V:\Instruction\CurriculumPublish\Elementary\NanjemoyCreekEnvironmentalEdCenter\1Materials

The second step is to complete the Group Information Form online 10-14 days prior to your trip (<http://tinyurl.com/NCEEC2122>). This form helps the cafeteria staff at Mt. Hope/Nanjemoy E.S. and our staff prepare for your trip.

The third step is to complete the pre-trip activities in the memory book. We ask that you make full use of the Memory Book with your students before, during and after the extended day trip to NCEEC to round out the students' experience. Upon completion of the pre-trip activities, collect the Memory Books and bring them with you.

When your secretary orders the bus, be sure that the departure time from your school has been calculated so that your group arrives at NCEEC promptly at 8:00 a.m. When groups arrive late, our schedule has to be readjusted, and students will not be able to participate in some of our activities.

In the event of a CCPS delayed opening, assume that your class will still be coming to NCEEC, though 1 to 2 hours later than planned, depending on the announced delay. If inclement weather is anticipated, please alert students, chaperones and the bus company of this information. Your trip will be cancelled and re-scheduled **only** if CCPS is closed for the day or if conditions prohibit bus transportation.

If you have any questions regarding your trip, please feel free to call the center or email me. Visit our website at <http://www.ccboe.com/schools/nanjemoycreek/> to learn more about the center, view pictures of the facility, visit with our birds and find links to helpful environmental websites.

Sincerely,

Timothy Emhoff
CCPS Environmental Education Resource Teacher

Trip Timeline

Prior to trip

- _____ Complete Memory Books pre-trip activities with students & **re-collect** memory books. Please do not rely on the students to remember to bring their individual books.

4 weeks prior to your trip

- _____ Meet with your 5th grade team to plan and submit the print job for your trip materials.
- _____ Check that bus arrangements have been made for your class to arrive at NCEEC promptly at 8:00 a.m. Bring the name and number of the bus contractor with you on trip.
- _____ Send home permission slips and collect the \$5.00 trip fee from each student (not chaperones) to deposit with your school office. Send **BOTH** your school permission slip as well as the NCEEC permission slip attachment.
- _____ Talk with parents to get volunteers to chaperone. **A minimum of 4 chaperones** are required. **We can accommodate no more than 6 chaperones plus yourself.** Note: anyone from your school may fill in if a chaperone backs out at the last minute.

2 weeks prior to your trip

- _____ Ask the Science teacher for assistance in completing the watershed lab with students. Provide them with the watershed lab activity found at the back of this booklet.
- _____ Complete your Group Information Form (<http://tinyurl.com/NCEEC2122>). Note all special needs, including instructional, behavioral, and medical including food sensitivities/allergies/restrictions. This information allows us to plan ahead for special needs. (template on next page)

1 week prior to trip

- _____ Request that your financial secretary cut you a check payable to CCPS to give to the NCEEC staff upon arrival. The secretary will also give you a receipt to be signed by NCEEC staff.
- _____ Send home the Chaperone Book to your designated chaperones prior to trip.
- _____ Complete the Green Team Responsibilities page in this packet.
- _____ Divide your class into 2 activity groups (Eastern Bluebirds and Box Turtles, as shown on nametag template) with a mix of boys, girls and ability levels in each group in preparation for the center's lessons. Assign 2 to 3 adults to each group.
- _____ Create and cut the name tags for students and chaperones using the template provided in this booklet. (Upon arrival, plastic nametag holders with clips will be made available that fit this particular template.) Make student names bold and large.
- _____ Purchase and pack s'more supplies if you plan for students to enjoy them during the campfire activity.
- _____ Review permission slips to be sure they are complete. **Bring them along with the emergency cards.**

2 days prior to trip

- _____ Pick up check and receipt from secretary.
- _____ Submit a class roster of students participating in the trip as well as your cell phone number to your principal and office staff in case they need to reach you. Make sure that you have principal and vice principal contact information for after hours and know what your principal expects regarding chain-of-command contact in case of an emergency.
- _____ Remind students to bring a lunch with drink (trash-free) that does not require heating. All lunches, food and drinks should be collected and packed in a box or bin.
- _____ Remind students to wear clothing appropriate for the season. Comfortable walking shoes with closed toes are required.
- _____ Explain to students they can purchase a t-shirt for \$15.00 by bringing a check or money order **payable to CCPS** with them to NCEEC. **Check or money order only.** Please collect these checks. Wristbands can be obtained as well for \$1 **donation.** Do **not** include the cost of the wristbands in the t-shirt check.

Day of trip

- _____ Make sure all students have a lunch. Provide school lunches if needed.
- _____ When students are getting on the bus, make sure they are properly attired for the weather.
- _____ If chaperone drops out the morning of trip (and you no longer have the minimum of 4), arrange with principal to provide a staff member to fill in.

Group Information Worksheet

This is a paper copy of all the information that you will need to complete on the online version of the Group Information Form at <http://tinyurl.com/NCEEC2122>. Please note: this information is vital for us and our kitchen staff to properly prepare for each classes individual needs. There is no need to provide the names of the students on this form.

Trip Date: _____ (mm/dd/yy)
Time students eat lunch _____
Number of students: _____
Number of Chaperones: _____ (min. of 4/max. of 6)
Number of teachers/IAs: _____ (one certified teacher required)

Instructional/Behavioral modifications:

Student/chaperone/teacher medical concerns (**non-food related**):

Student food allergies/restrictions: Yes or No

Student 1:

- List specific food allergies/restrictions for student #1:
- Will parent be sending food besides the lunch? Y N Breakfast or afternoon snack?

Student 2:

- List specific food allergies/restrictions for student #2:
- Will parent be sending food besides the lunch? Y N Breakfast or afternoon snack?

Student 3:

- List specific food allergies/restrictions for student #3:
- Will parent be sending food besides the lunch? Y N Breakfast or afternoon snack?

Student 4:

- List specific food allergies/restrictions for student #4:
- Will parent be sending food besides the lunch? Y N Breakfast or afternoon snack?

Student 5:

- List specific food allergies/restrictions for student #5:

Will parent be sending food besides the lunch? Y N Breakfast or afternoon snack?

Teacher Responsibilities During the Trip

Arrival:

- Supervise the unloading from the bus. All food and beverages must be stored in the pavilion. Students may carry water with them. It helps if lunches are collected at school and placed in a bin for easy unloading at NCEEC (recycling bins work great for this).
- Hand out morning snack.
- Stuff nametag holders and hand out to students. Create nametags for the chaperones in each group (have at least 2 adults assigned to each group).
- Collect t-shirt checks.
- Give trip check, receipt, t-shirt checks and Green Team Responsibilities sheet to staff member assigned to your group.
- Be prepared to share any teaching modifications and medical needs with staff. NCEEC staff members need to be aware of all medications that might be dispensed during your students' visit.

During Day:

- Assist staff in keeping to the schedule as closely as possible. Please note that any time "lost" during the day means that we will have to cut short or delete activities.
- Supervise students at all times throughout the day including during activities and restroom breaks.
- Remind students to meet their personal responsibilities including keeping the site clean.
- Manage medical and disciplinary situations including principal and parent contact. **(Make sure you have principal & vice principal contact information for after-hours and know what your principal expects regarding discipline issues and chain-of-command contact in case of an emergency)**
- Remain on site with students for the duration of the trip, even if emergency personnel must evacuate a student.
- Supervise the distribution of lunches and the students during lunch time.
- Lead students on a hike/scavenger hunt through the woods (materials supplied by NCEEC).
- Supervise memory book time in the afternoon so staff may speak with chaperones and set up evening activities.

Evening:

- Assist staff with distribution and supervision of the afternoon snack and campfire activities.
- Oversee that all food restrictions are being met.
- Help students follow safety rules during campfire.

Before Departure:

- Make sure students have cleaned up the campfire area and have collected all of their gear with them.
- Assist staff member with the collection of all loaned items before students board the bus.
- Supervise the loading of the bus.

If you have any questions prior to the trip, please contact us at 301-743-3526 or email temhoff@ccboe.com.

Thank you for helping us create a memorable and exciting environmental experience for your students!

Tentative Schedule

NOTE: *Weather, delayed arrivals, staffing, tides and unforeseen events require flexibility in our schedule here at NCEEC. Rather than specific times, the usual order of the day is provided along with approximate duration of each activity.*

Activity:	Times:
Arrival	8:00 a.m.
Greetings on bus	5 minutes
Snack and parent orientation	20 minutes
Restroom break/teacher orientation	15 minutes
Fire circle orientation	10 minutes
Activity I	80 minutes
Restroom break	15 minutes
Activity II	80 minutes
Restroom break	15 minutes
Trash free lunch & stewardship	60 minutes
Take out the Trash Relay	10 minutes
Restroom break	15 minutes
Watershed Model	20 minutes
Exploration Activities	60 minutes
Reflections in Memory Book	15 minutes
Raptor Visit	20 minutes
Restroom break	15 minutes
Trash free lunch discussion	10 minutes
Late afternoon snack	30 minutes
Campfire program	50 minutes
Restroom break, clean up, bus prep	20 minutes
Depart NCEEC	6:00 p.m.

Food Details

The breakfast snack typically consists of a muffin and juice.
The late afternoon snack is typically hot dogs, chips/pretzels and juice.



Green Team Responsibilities



<u>Coaches:</u>	<i>MORNING</i>	<i>AFTERNOON</i>	<i>EVENING</i>
<i>Liquids</i>	_____	_____	
<i>Recycling</i>	_____	_____	_____
<i>Compost/ Earth Cube</i>	_____	_____	_____
<i>Wrappers</i>	_____	_____	_____
<i>Compost-Fruits/Veggies</i>		_____	
<i>Plastic Bags</i>		_____	
<i>Trash</i>		_____	

ALL DAY

<i>Light Savers</i>	_____ (Boy)	_____ (Girl)
	_____ (Optional)	_____ (Optional)
	_____ (Optional)	_____ (Optional)
<i>Door Keeper</i>	_____ (Boy)	_____ (Girl)
	_____ (Optional)	_____ (Optional)
<i>Litter Patrol</i>	_____	_____
	_____ (Optional)	_____ (Optional)
	_____ (Optional)	_____ (Optional)

Optional - Not required for the trip. If your class is less than 20, 1st skip assigning evening jobs then skip morning jobs.

Name Tag Template for 2 Activity Groups – Bluebirds and Box Turtles

Prior to trip, cut each tag along lines provided so they will fit in our plastic holders.

(NAME – PRINT LARGE)

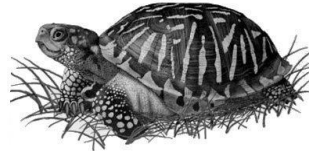
Duty: _____



Eastern
Bluebird

(NAME – PRINT LARGE)

Duty: _____



Box Turtle

(NAME – PRINT LARGE)

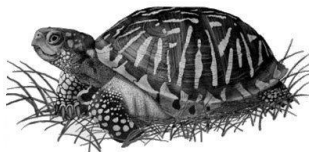
Duty: _____



Eastern
Bluebird

(NAME – PRINT LARGE)

Duty: _____



Box Turtle

(NAME – PRINT LARGE)

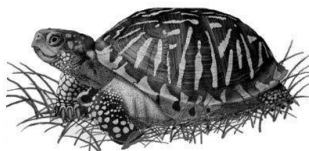
Duty: _____



Eastern
Bluebird

(NAME – PRINT LARGE)

Duty: _____



Box Turtle

FOLD UP HERE



FOLD UP HERE



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Create a Model of a Watershed

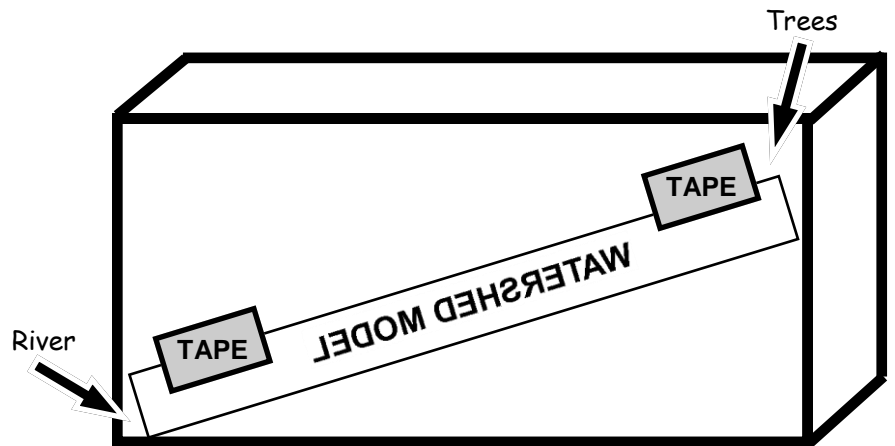
A **watershed**, or **drainage basin**, is an area of land that sheds or drains into a particular body of water. Today you will be making a model of a watershed, showing how the precipitation that falls on mountains, cities, suburbs, and rural areas drains into a river.

Materials:

- Shoe box
- Aluminum foil
- Tape
- Watershed Model Page
- Watercolor paints or markers
- Spray bottle with water

Procedure:

- Color the Watershed Model Page provided by your teacher using the watercolor paints or markers
- Fold up the two sides of the page where indicated.
- Line the shoe box with a piece of aluminum foil.
- Tape the page into the box. The forested area gets taped near the top of the shoebox, and the page slopes downward toward the river. See the diagram below.
- Spray water onto the Watershed Model, starting with the forested area, working downward, toward the river.



Side view of the Watershed Model.

Observation:

Describe what happened to the water when it was sprayed on the Watershed Model. The water started out clear when you sprayed it onto the model. What happened as the water flowed toward the river?
