Dodgeville School District's Environmental Footprints

and the

10-10-10 Pedal Power Community Biking Events

I. Eco – Footprint Activities

1. Elem. – Bobby Bigfoot – <u>http://www.kidsfootprint.org/</u>

Student completes exercise either in school or at home and writes one fact from the end of the exercise. Student also writes a brief plan of how she and/or her family can take a step in reducing their eco-footprint. Use form provided.

2. Mid – Zero footprint - <u>http://www.zerofootprintkids.com/kids_home.aspx</u>

Student completes exercise either in school or at home and writes one fact from the end of the exercise. Student also writes a brief plan of how she and/or her family can take a step in reducing their eco-footprint. Use form provided.

3. HS - A.) Environmental Protection Agency -

http://www.epa.gov/climatechange/emissions/ind_calculator.html

Student completes calculation and writes a paragraph summary of information learned and how changes could help. Will need the following info from home:

a. Home heating source b. Annual mi. traveled per vehicle

c. Ave. mpg for each vehicle d. Ave. monthly cost of each type of home fuel B.) Migrating Climates Activity

http://www.ucsusa.org/greatlakes/winmigrating/glwinmig_intro.html

Student completes exercise for Wisconsin's projected climate migration. Completes brief prepared worksheet.

II. Activities – Events

- 1. Elem. If completes activity
 - a. Name on School's Eco Wall of Fame
 - b. Name entered in Raffle Bike paraphernalia
 - c. Writing selection possibly selected for re-print in Dodgeville Chronicle
 - d. Eligible to participate in Pedal Power Parade, 10-10-10
- 2. Mid. If completes activity
 - a. Name on School's Eco Wall of Fame
 - b. Name entered in Raffle Bike paraphernalia
 - c. Writing selection possibly selected for re-print in Dodgeville Chronicle
 - d. Eligible to participate in Pedal Power Parade OR free entrance in Bike Tour, 10-10-10
- 3. HS. If completes activity
 - a. Submit work to sci. or soc. studies teacher for extra credit
 - b. Name entered in Raffle Bike paraphernalia
 - c. Writing selection possibly selected for re-print in Dodgeville Chronicle
 - d. Eligible for free entrance in Bike Tour, 10-10-10

III. Components to Organize

- 1. Create info sheets for teachers and forms for students use.
- 2. Make Eco-Wall of Fame posters for hallways
- 3. Solicit financial donations / prizes (bikes?)
- 4. Contact Jean Bern Jones for Chronicle coverage
- 5. Contact city, Greg Lee, about bike parade route organize time, place etc.
- 6. Impress staff to assist students in participation
- 7. Register with 350.org as part of the Global Work Party on 10-10-10

Green and Healthy Schools Fall 2010 Initiative

Environmental Footprints and

10-10-10 Pedal Power Community Event

<u>RATIONALE</u> – Our students are growing up in a rapidly changing world. The climate their children and grandchildren grow up in is very likely to be significantly different than the one we experienced as children. We're obligated to give them some basic understanding about how they can make changes in their lifestyles to help mitigate the most severe impacts of climate change.

<u>SCI. RESOURCES</u> – The most recent, 2007, report from the over 1,200 climate scientists from 130 countries of the Intergovernmental Panel on Climate Change.

<u>AFFILIATION</u> - 350.org – In '09 we partnered with this group in an international campaign to teach students about carbon dioxide levels in the atmosphere. This year on Oct. 10 (10-10-10) we will once again join them in an international "Global Work Party." Our "work" will be to promote bike riding and bike routes on Oct. 10.

TIMEFRAME - 1. Environmental foot print activities - Sept. 27 - Oct. 8

2. Bike "timed ride" (DHS / DMS) and Pedal Power Parade (DMS / Elem.) -

Sunday Oct. 10.

MOTIVATORS

While students may complete the "footprint" activity either at home or in school, YOU will be the primary motivator for your students. They will most likely learn from these exercises if YOU enthusiastically support their participation. We strongly encourage you to find time to at least begin this activity in your classrooms (where appropriate).

Additionally, more tangible incentives include:

K-8th - For those who complete the footprint activity: a.) Entry into a raffle for bike-related prizes b.) Name on temporary "Eco-Wall of Fame" in your building or classroom. c.) Chance to have their writing piece published in the Chronicle. d.) Eligible to ride in the 10-10-10 Pedal Power Parade and win additional prizes if in attendance. (or free entry to bike tour for 6-8th graders).

HS - For those who complete the footprint activity: a.) Entry into a raffle for bike-related prizes b.) Chance to have their writing piece published in the Chronicle. c.) Chance to

submit activity for extra credit in science or social studies d.) Free entry to Mr. Allison's bike tour.

<u>ACTIVITIES</u>

Lower Elementary – K-4th and Upper Elementary – 5th – 8th

(K, 1st, and 2nd grades will likely want to do this activity with your older "classroom buddies" class.)

1. Reference the "Bobbie Bigfoot" (K-4) or the "Zero Footprint Calculator" (5-8) worksheet / activity. The worksheets should contain all the information necessary to complete the activity.

2. The "credit slips" on pg. #2 serve two purposes. A.) Your building or classroom will have an "Eco-Wall of Fame" displayed to recognize those students who have completed the footprint exercise. B.) These slips will be used to as the student's raffle ticket. (Feel free to modify these slips as needed. Eg. Type in your name and grade before you photocopy.) When the student completes the activity have him / her fill out one of these slips and add it to the "wall of fame." (If they have a parent signature, have them make a second slip for you to keep as an additional raffle chance.) After 10-10-10 please take down all the slips,

add them to the additional slips (earned by parent signature) and return them all to your G & H Schools building rep.

HINT: When putting the slips on the wall, put two tape <u>rolls</u> on the back outside edges. When you take them down, if the tape comes too, just fold the slip in half with the tape inside so the slip can be part of the raffle ticket pile without sticking to other slips.

3. Select 2 (two) of the writing pieces that you think would be especially appreciated for publication in the Dodgeville Chronicle. Return them to your G & H School s building rep. The committee will make the final selections to submit.

<u>High School</u>

1. Use the "Emissions Calculator / Migrating Climates" worksheet. It should be self-explanatory.

Consider how you can give credit in your class to students who complete the exercise.
Select 3 (three) of the writing pieces that you think would be especially appreciated for publication in the Dodgeville Chronicle. Return them to your G & H School s building rep. The committee will make the final selections to submit.

Name

Bobbie Bigfoot

10-10-10 Initiative activity for Grades 1-4

Find out how big Bobbie's "Ecological Footprint" is on the earth. Will there be enough resources on <u>one</u> earth for the way Bobbie lives or will he need more? Let's find out!

<u>Go</u> to <u>www.kidsfootprint.org</u> You will be asked 9 questions about the way you live. When you've answered all the questions the Foot-O-Meter will show if Bobbie could change some ways so that he would only need 1 earth.

Show how many earths he needs:

How many earths does Bobbie need?

<u>Now</u> click on the link at the bottom of the Foot-O-Meter screen to see suggestions for reducing <u>your</u> ecological footprint. Decide on something you and your family can do to reduce your footprint and write your plan below.

(Your teacher will determine if your paragraph's clarity and neatness are appropriate.)

Parent Signature (This is not required, but your name will be entered <u>twice</u> in the raffle if signed!)

Eco – Detective

name

teacher

has completed the <u>Search for Bobbie's Footprint</u>, is entered in the raffle drawing and may ride in the Pedal Power Parade with a chance to win even more prizes! CONGRATULATIONS!!!

Eco – Detective

from

name

name

name

teacher

grade

grade

has completed the <u>Search for Bobbie's Footprint</u>, is entered in the raffle drawing and may ride in the Pedal Power Parade with a chance to win even more prizes! CONGRATULATIONS!!!

Eco – Detective

_ from

teacher

grade

has completed the <u>Search for Bobbie's Footprint</u>, is entered in the raffle drawing and may ride in the Pedal Power Parade with a chance to win even more prizes! CONGRATULATIONS!!!

Eco - Detective

from

teacher

grade

has completed the <u>Search for Bobbie's Footprint</u>, is entered in the raffle drawing and may ride in the Pedal Power Parade with a chance to win even more prizes! CONGRATULATIONS!!! Name_

Zero Footprint Calculator <u>10-10-10 Initiative</u> activity for 5-8th Graders

In this exercise you will get a sense of the size of your the ecological footprint and how it compares to others around the world.

Be a Canadian for a day! Because the website you'll use was created by a company in Canada, you get to pretend that you are a Canadian! However, please answer the questions accurately about your real life here in the USA. At the conclusion of the exercise, you'll be able to see your results as an actual U.S. citizen.

There are <u>3 parts</u> to this exercise. Complete all three and you'll be eligible for all of the opportunities / prizes in the 10-10-10 initiative.

1. Go to <u>www.zerofootprintkids.com</u>. You will be asked 30 easy to answer questions about your life style including transportation, food use, recycle practices etc. (NOTE: The term "cottage" means any type of summer home. Also, a metric ton called a tonne, is about 2,204 lbs.)

2. Complete the table below.

3. Write a paragraph <u>on the back</u> about some realistic way your family could reduce its ecological footprint. <u>Turn the completed exercise in to your teacher.</u>

<u>1.</u> Go to the website and answer the questions.

<u>2.</u> Complete this table. You may pick 2 other countries of your choice to complete the table. (China and/or India are interesting choices!)

	YOU (as a Canadian)	U.S.A.	
Carbon Tonnes (2,204lbs) per year			
Land Acres / year			
Trees # Trees/year			
Water Cu. Meters / yr.			
TOTAL # of earths it would take to support this lifestyle			

<u>3.</u> Use some of the topics/ideas from the calculator to write a paragraph describing some way(s) your family could actually reduce its ecological footprint. Give details as to how that would actually work in your home. What difficulties might you encounter? How will you get your family members to join with you? (Your teacher will determine if your paragraph's clarity and neatness are appropriate.)

Parent Signature (This is not required, but your name will be entered <u>twice</u> in the raffle if signed!)

Eco – Investigator _ from ______teacher

name

name

grade

has completed the Zero Footprint Calculator exercise is entered in the raffle drawing and may ride in the Pedal Power Parade with a chance to win even more prizes and /or ride in Mr. Allison's bike tour. CONGRATULATIONS!!!

Eco – Investigator

from ______teacher

grade

has completed the Zero Footprint Calculator exercise is entered in the raffle drawing and may ride in the Pedal Power Parade with a chance to win even more prizes and /or ride in Mr. Allison's bike tour.

CONGRATULATIONS!!!!

Eco – Investigator

from

name

name

teacher

grade

has completed the Zero Footprint Calculator exercise is entered in the raffle drawing and may ride in the Pedal Power Parade with a chance to win even more prizes and /or ride in Mr. Allison's bike tour.

CONGRATULATIONS!!!

Eco – Investigator

from ______teacher

grade

has completed the Zero Footprint Calculator exercise is entered in the raffle drawing and may ride in the Pedal Power Parade with a chance to win even more prizes and /or ride in Mr. Allison's bike tour. CONGRATULATIONS!!!

Name

Emissions Calculator / Migrating Climates <u>10-10-10 Initiative</u> - HS

There are <u>2 parts</u> to this exercise. Complete both and you'll be eligible for all of the opportunities / drawings in the 10-10-10 initiative. (Ask your teacher about extra credit for completing this exercise!)

A.) Household Emissions Calculator

In this activity your will determine a ballpark estimate of your household greenhouse gas emissions footprint and learn ways to make it smaller.

1) Before you go to <u>www.epa.gov/climatechange/emissions/ind_calculator.html</u>, you will need to find out these pieces of info at home: a. <u>Home heating source</u> b. <u>Annual mi. traveled per vehicle</u> c. <u>Ave.</u> <u>mpg for each vehicle</u> d. <u>Ave. monthly cost of **each type** of home fuel (elec., fuel oil etc.)</u>

2. Now go to the website and work through the calculator. It should only take about 15-20 min. When finished, keep the site open and jot down a few facts and figures of interest about what you've learned about your contribution to atmospheric carbon.

3. Write a paragraph relating some of the most interesting information you've learned. What surprised you? How do your total CO2 emissions compare to the national average? What lifestyle changes might you and your family consider? Why should we bother learning about the amount of emissions we add to the atmosphere? (Hint: Some students will find it easier to write this paragraph <u>after</u> they have completed the 2nd activity about migrating climates.) In this exercise you will see how various Great Lakes region states climates are projected to change by the end of the century.

1. Go to <u>http://www.ucsusa.org/greatlakes/winmigrating/glwinmig_intro.html</u> Check out the projections for change for various states.

2. Complete the chart below for Wisconsin and two other states of your choosing.

	Wisconsin	
Temp. Increase <u>Summer</u> 2030		
2095		
Temp. Increase <u>Winter</u> 2030		
2095		
Precipitation % Increase / Decrease <u>Summer</u> 2030		
2095		
Precipitation % Increase / Decrease <u>Winter</u> 2030 2095		
% Increase extreme precip. events Summer 2095		
Winter2095Will feel likewhich otherstate?Summer2030		
Summer 2095 Winter 2095		

Are you an

Eco-Bigfoot? and 10-10-10 Pedal Power

Complete the environmental-footprint challenge exercise in school or at home and be eligible for:

- 1. Some sweet biking prizes
- 2. A chance to be published in the Chronicle
- 3. A ride in the 10-10-10 (Oct. 10th) Pedal Power
- Parade or free entry in Mr. Allison's bike tour.

Raffle Prizes Include

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See your <u>science</u> or <u>social studies</u> teacher for details!

Join the <u>Pedal Power Parade</u> and be eligible for <u>more</u> prizes and free refreshments!

THANK YOU to our sponsors: Culvers, Sustain Iowa Cty, Wal-Mart, True Value, Grassroots Citizens of Wis., State Farm Ins., Little Black Dress, Radio Shack, Dodge Theatre Just how **big** are your

Eco-Feet?

10-10-10 Bike Tour

and the

Complete the environmental-footprint / climate migration challenge exercise in school or at home and be eligible for:

- 1. Some sweet biking prizes
- 2. A chance to be published in the Chronicle

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3. Free entry in Mr. Allison's 10-10-10 (Oct. 10th) bike tour.

Raffle Prizes Include

See your <u>science</u> or <u>social studies</u> teacher for details!

Your world is changing! Learn about it and act on it!

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