**Biomimicry Workshop 2012**

**Class 3:** Introduction to Team H2O and Team Organize. Review of biomimicry methodology (scoping). Next steps in biomimicry methodology (creating and evaluating).

**Intent of Class:** Have a working knowledge of how to apply the biomimicry methodology.

**Homework: A) Team introductions B) Review the Challenge to Biology work sheet and start one for your challenge and Tell a story C) AskNature.org D) watch video E) iSite**

**Homework is due to Marie via email by June 14, 2012**

**A) Team Introduction:** The remaining 2 teams will introduce themselves at the next webinars. This way we will be somewhat familiar with each other before the in-person sessions and I can get to know you all better. For this assignment, Teams 3 and 4 must submit one or a few (keep it simple) power point slides with the following:

1. Team Name

2. Who will present – Myla will turn the presenter status over to one the team members to go through the power point slides.

3. Introduction slide(s): you may want to state your names, education and/or experience, photos, areas of expertise, place of work, what do you like to do?, what brought you to biomimicry?

None of these are mandatory (except for your name) - decide what you would like to know about

each other and tell the rest of the class.

June 21 Challenge Team #3: How does Nature communicate?

June 21 Challenge Team #4: How do Front Range species adapt to seasonal changes in climate, inform human technologies, contribute to problem solving and how can we interpret these functions for the human visitor

**B)** Review **the Challenge to Biology work sheet and start one for your challenge:** You have

completed the initial steps in the Challenge to Biology Methodology by identifying the

function(s) and context for your challenge. Attached is the methodology with the example from

Great Sand Dune’s portable hydration challenge.

***Tip:*** A*ccess this summary before the webinar as it can be used as the “notes” for the information we will cover in the webinar.*

As a team, review and discuss this methodology. Fill in the part that your team has already

completed. Biologize your function(s).

**Tell a story:** Attached is the case study for the Great Sand Dunes workshop challenges. Once your team has found a solution for your challenge, your experiences will be valuable to others working in the field of biomimicry or to those considering using the biomimicry approach. It is important to document your progress, mistakes, eureka moments and other thought as you progress. This will serve as useful notes for your case study report.

Write a paragraph about some part of your process to date, either about forming a team, identifying your function or context, or even the use of the webinar approach. One member of each team will read this short story to the group during our June 21st webinar.

**C) AskNature.org.** (*Ongoing*) You will be using Asknature as one place to discover strategies

from nature to perform your function(s). Log onto the web page and go through the tutorial and practice using the site. At the end of May an EPA student intern, Nessly, will begin her 12 week assignment at our office and will assist teams in accessing biological information on organisms that perform the function(s) your team has identified. If you want to move ahead, start finding strategies in the biological literature. Next month’s webinar will include instructions on how to abstract the deep design principles from these strategies.

**D) Watch the video** link provided in the email. It is less than 5 minutes and communicates the

cycle of change in nature and relates it to human change.

**E) iSite:** Continue your iSite: here are a few ideas for you to try if you find them interesting. If

not – just continue to observe and expand your observation skills in Nature.

**Translate what you see:** Create a drawing of one system in the environment you see around you, for example, draw the system of energy flows. Use arrows, symbols, and notes like those you would find in any engineering drawing.

**Consider a business or government organization as an ecosystem:** Think about what it would mean to run a company or a government organization like the ecosystem that you are in right now runs. How would you translate the terms describing the resources, systems, flows, and functions of the ecosystem into terms describing the resources, systems, flows and functions that make sense for a company or government organization? This will help you translate biological language into bureaucratic, engineering and design language for your challenge.