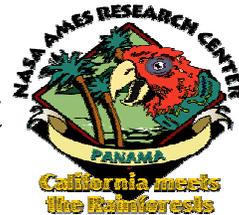




# JASON XV City Educational Event

## List of Activities

As of 12/18/03



The overall goal of the event is to provide an engaging and educational environment that supports the JASON XV, *Rainforest at the Crossroads* curriculum and reinforces the JASON Foundation for Education and NASA partnership. In designing activities and recruiting City sponsors, emphasis is placed on partnering with local non-profit (NP) and educational organizations.

It is estimated that over 11,000 JASON students and adults will visit JASON City during January 26-30 and February 2-6, 2004.

1. **Design a Mola**-Sponsor: Ames Education. **Manager: Leslie Flowers**- Molas are beautiful and interesting cloth creations of the San Blas Kuna women of Panama. Designs vary from geometric to birds, village scenes, animals, or symbols depicting cultural or religious themes. Sewn by hand, the complicated stitching requires hours of hard work. Our students will make their own molas from colored construction paper.
2. **NASA Satellite Puzzles**: Main Sponsor: Ames Education; Assistance: Science Applications International Corp, **Mike Fitzgerald**-Students will study the wide spread prevalence of tropical deforestation using large 4 X 6 foot puzzles made from satellite photos of Costa Rica.
3. **Rainforest Insect Discovery Lab**: Sponsor: Center for Ecosystem Survival, San Francisco (NP), **Contact: Norman Gershenz**- seeks to instill a sense of awareness, wonder and appreciation of insects, rainforest biodiversity, and its importance to us. In addition, the goal is to inspire changes in people's day-to-day attitudes and activities, encouraging them to take actions to protect the natural world. Partial Insect List:
  - Whip Scorpion
  - Hissing Cockroach
  - Walking Sticks
  - Horse Lubber Grasshoppers
  - Darkling Beetles
4. **Spirit of the Rainforest**: Sponsor: WildLIFE Associates, Half Moon Bay (NP), **Contact: Steve Carlin**- Students will see unusual and awe-inspiring animals, hear the mysterious sounds of the living forest and, on a projection screen, view close-ups of rainforest habitats and the diverse native peoples who inhabit them. We create a positive look at the tropical rainforest and its plants, wildlife and people. This program is a powerful multicultural learning experience. Animal List (rotated on daily basis):

- Red Footed Tortoise
  - Tarantula
  - Burmese Python
  - Binturong
  - Prehensile-Tailed Skink
  - Turkey Vulture
  - Squirrel Monkey
  - Kinkajou
  - Two-toed Sloth
  - Alligator
5. **Rainforest and California Bats:** Sponsors: Oakland Museum, Oakland and California Bat Conservation Fund, San Francisco (both NP)- Students will learn about the 15 different bat species found in California and compare them to the hundreds of species found in Panama. They will find out which species are endangered and why and listen to the incredible sounds of bats and learn what they mean. Participants will also discover what they can do to help bats survive.
  6. **Amazon Trail:** Sponsor: Apple Computer, Contact: Don Zundel-Curriculum Development: **Mike Weir:** Using Amazon Trail 3 software on iMac computers, student will take a virtual expedition to the rainforests of Brazil, learning about the plants and animals as they go.
  7. **EnvironScape:** Sponsor: Santa Clara Valley Water District, San Jose; **Contact: Kathy Machado-** A hands-on 3D experiment with a watershed model that includes information on watersheds, flood plains, run-off, flood control measures and types of soils.
  8. **Rainforest Wildlife Art:** Sponsor: Santa Clara Valley Water District, San Jose; **Contact: Kathy Machado** -Another art/craft activity with large plant and animal stamps and water based paint where young people make pictures of life in a rainforest. All paints used are manufactured by Palmer Paints, Inc- and conform to ASTM D-4236
  9. **Study of Fresh Water Samples:** Sponsor: Marine Science Institute, Redwood City (NP)-**Contact: Dennis Rogers-**Students will look for life from water samples taken from local streams and rivers. Also, data collection and analysis activities that utilize (JASON Foundation partner) Texas Instruments hand held technology will be demonstrated; TI 73 Explorer graphing calculator and a Computer Based Laboratory.
  10. **Study of S.F. Bay Mud:** Sponsor: Marine Science Institute, Redwood City (NP)- **Contact: Dennis Rogers-**Daily samples of bay mud will be studied by students looking for animal life. This is similar to what would be found along the banks of the Panama Canal.

11. **Observation of Rainforest Biological Artifacts:** Sponsor: Happy Hallow Zoo, San Jose (NP); **Contact Shannon Noll** - Students will have an opportunity to observe biological artifacts (biofacts) from the rainforest up-close and hands-on and to fill out observation sheets about the biofacts.
12. **Reduce, Reuse, and Recycle to Save the Rainforest:** Sponsor: Happy Hallow Zoo, San Jose (NP); **Contact Shannon Noll**- This activity centers on products we use every day that come from the rainforest (i.e. rubber, OJ, paper) and providing practical conservation ideas.
13. **Saving the Rainforest, A Cup at a Time:** Sponsors: TransFair USA, Oakland (NP); Santa Cruz Coffee Roasting Co.-; Contacts: Nathan Beers and Sarah Crosby-Baker. **Manager: Leslie Larson** -Adults will be given free shade grown coffee and information about why buying Fair Trade Certified <sup>TM</sup> organic coffee is good for the rainforest and the people who live and work there. Young people will be able to enter a daily drawing for a free canister of Fair Trade Hot Chocolate.
14. **Embera Body Decorating,** Sponsor: Ames Education-Replicating the natural dark purple fruit dye called Jagua used by the native Embera peoples of Panama with non-toxic paints. Students will have intricate lines painted on either their arms or faces in much the same fashion as the Embera. Embera photos by Tim May to be used with permission. All paints used are manufactured by Palmer Paints, Inc- and conform to ASTM D-4236
15. **Recycle Relay:** Sponsor: TBD-Students will learn how they can help save the rainforests and their local ecology by recycling household items (paper, plastic, glass, cans, etc). The Recycle Relay is a race in which not only speed is important but knowing what can and cannot be recycled. Prizes will be awarded to winning teams.
16. **Hibiscus Rings:** Sponsor: Ames Education, **Manager: Ann Trammel** (this activity will only be available on January 29) This craft activity allows students to make a colorful flower ring (hat) much like the ones made by the indigenous peoples of Panama. The Panamanian flower rings are usually made up of hibiscus flower, ours will be made from paper.
17. **NASA Remote Sensing:** Sponsor: SOFIA **Manager-Ed Alley**-IR camera-for auditorium only. Students will study the various levels of heat emitted from fish, plants, rocks, people, furniture, etc. using a portable infrared camera.
18. **Earth Balloon:** Sponsor: San Jose Beautiful (NP); **Contact: Russ Louthian**-The Earth Balloon is an inflatable 19-foot portable classroom. It is constructed of lightweight nylon and imprinted inside and out with a collage of over 5,000 NASA satellite photos covering all of the earth's surface area. Geography and the

Panama Isthmus will be discussed during each 7 minute program from within the balloon.