Native IMAGE First Year Report: Goals Achieved - Third Tribal Forum - August 2004 - Sandiego, CA

Hank Lehrer  
*Embry-Riddle Aeronautical University Professor, retired, lehrerh@erau.edu*

Jan Bingen  
*Little Priest Tribal College*

Karisa Vlasek  
*University of Nebraska at Omaha*

Brent D. Bowen  
*Embry-Riddle Aeronautical University, bowenb6@erau.edu*

Follow this and additional works at: [https://commons.erau.edu/ni-s4ea-san-diego](https://commons.erau.edu/ni-s4ea-san-diego)

**Scholarly Commons Citation**  
Native IMAGE First Year Report: Goals Achieved

Native IMAGE

- Third Tribal Forum
  - August 2004; San Diego, CA
  - Jan Bingen: Little Priest Tribal College
  - Karisa Vlasek & Hank Lehrer: University of Nebraska at Omaha
The Native IMAGE Three-Legged Stool

- Community Outreach
- Curriculum Enhancement
- Workforce Development
The Founding Native IMAGE Team
Major Initiative This Year

- Increase Geoscience awareness in the Winnebago Public Schools and at Little Priest Tribal College
- Present the results of our programs to regional and national audiences
- Enhance the partnership between IMAGE and Winnebago tribe
- Add as much geospatial material into the LPTC STEM curriculum as possible
Geophysical Training at the Sac Fox Reservation in Kansas

- Introduction to:
  - Geophysical Mapping
  - Ground Penetration Radar
  - Magnetic Gradient
  - Ground Conductivity
  - Resistance Survey
  - Soil Compression

- Study of a former tribal cemetery
- Develop a geophysical assessment of that cemetery
Initial Field Work
Family Geoscience Preparations
Dinner, Lecture, and Table Work

Native IMAGE & NASA Nebraska
Geospatial
Family Geospatial Science Gymnasium Activities
GPS Scavenger Hunt

- Four separate points scattered around the school
- Family teams worked together
Family Geospatial Goals

By the time a Nebraska Native American Student completes the 8th grade, they will be able to:

- Accurately plot course on maps and charts
- Operate a GPS receiver
- Use geospatial computer software such as ESRI ArcExplorer
- Relate basic Remote Sensing Concepts to reservation land planning and agricultural use
Geospatial Boot Camp

- April 2004 One-day workshop with 15 Attendees
- Representatives of
  - LPTC
  - Winnebago Tribe
  - Local School Districts
- Introductory Training in
  - GPS
  - GIS
  - Remote Sensing
Classroom Lecture

Native IMAGE & NASA Nebraska
Geospatial
Computer Lab Exercises

- ARCEXplorer
- Terraserver
Outdoor GPS Scavenger Hunt
Graduation Picture
Nebraska Academy of Science
Nebraska Wesleyan College

- Presented a poster session and attended TAC meeting
AIAA National Convention
Conclusions

- Students at all levels (K -14) are responsive to learning about geospatial subjects
- A solid partnership with key tribal officials is emerging
- The Native IMAGE initiative has earned kudos from:
  - North Central Association of Colleges and Schools
  - NASA Space Grant and EPSCoR officials
What’s in the future for Native IMAGE and NASA Nebraska Geospatial?

- Current negotiations are in progress with Oregon to provide geospatial training to a Native American group
- November date for the 2\textsuperscript{nd} Annual Nebraska Native American Educational Summit
- Convening the 3\textsuperscript{rd} Annual Grant Proposal Writing Workshop in December
- Continuation of successful Family Science project with LPTC (supported by Native IMAGE) as the lead institution
Contact Information

Jan Bingen.
Native IMAGE Director
CIS/Business Department Chair
Little Priest Tribal College
601 E. College Drive
Winnebago, NE  68071
Phone: 402-878-2380
Fax: 402-878-2355
Email: jbingen@lptc.bia.edu

Hank Lehrer, Ph.D.
Professor Retired: Aviation Institute,
Native IMAGE Advisory Board Chairman
University of Nebraska Omaha
29923 Zachary Lane, Rossford, OH 43460
Email: hanklehrer@buckeye-express.com

Karisa K. Vlasek
Geospatial Extension & Research Specialist
NASA Nebraska Space Grant & EPSCoR
Aviation Institute, Univ. of NE at Omaha
Phone: (402) 554-2042
Fax: (402) 554-2695
Email: kvlasek@mail.unomaha.edu

Native IMAGE & NASA Nebraska
Geospatial
Questions?

Thank you!