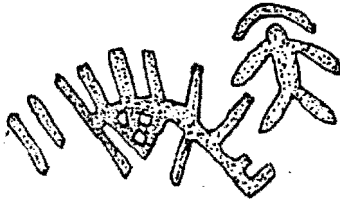


During 1992, we honor this county's native peoples as vital participants in the history of the United States. This year gives us the opportunity to recognize the special place that Native Americans hold in our society, to affirm the right of Indian tribes to exist as sovereign entities, and to seek greater mutual understanding and trust. Therefore, we gratefully salute all American Indians, expressing our support of tribal self-determination and assisting with efforts to celebrate and preserve each tribe's unique cultural heritage.

The Congress, by Public Law 102-188, has designated 1992 as the Year of the American Indian. I encourage Federal, State, and local government officials, interested groups and organizations, and the people of the United States to observe this year with appropriate programs, ceremonies, and activities.

In witness whereof, I have hereunto set my hand this second day of March, in the year of our Lord nineteen hundred and ninety-two."

signed GEORGE BUSH



OREGON TRAIL INTERPRETIVE CENTER OPENS

An Oregon Trail Interpretive Center was dedicated near Baker City in northeastern Oregon on Memorial Day this year. The Center is located on Flagstaff Hill, several miles northeast of Baker City. The creation of the Center was made possible by money from the Oregon Lottery, the federal government, and charitable organizations. Exhibits focus on the Oregon Trail experience from Independence, Missouri to Oregon City and include touch panels, music, and short movie segments of the journey, as well as excerpts from trail diaries and authentic artifacts. There are hiking paths around the hillside where one can look at the ruts left by wagons passing over the Oregon Trail.

THE GRAPEVINE

The Grapevine is a relatively new newsletter that is designed for private sector contractors. It is published monthly and includes sections which cover governmental news, publications, calendar of meetings, corporate profiles, corporate subscribers lists, special services, among other topics. It also contains classified advertisements for job announcements, positions wanted, information requests, equipment for sale or rent, etc. For further information contact The Grapevine, Gray & Pape, Inc., 1318 Main Street, Cincinnati, OH 45210, or phone 513-287-7799.

CURRENT RESEARCH

DIGITAL FUTURES FOR OREGON ARCHAEOLOGISTS: NEW WAYS TO PLAY WITH YOUR DATA

Craig Skinner
INFOTEC Research, Inc.
Eugene, OR

The two figures illustrated here are digital elevation models (DEM's) constructed from digitized elevation data originating from the National Geophysical Data Center's 3-second elevation database. The database for this single quadrangle contains 22,500 separate elevation data points. The data are organized as XYZ coordinate triplets, where X = longitude, Y = latitude, and Z = elevation. While you can manually pull data from topographic maps and turn them into digitized data files for your computer, I don't recommend it. A listing of these triplets for a single quadrangle map is 496 pages long!

If you have a fast IBM PC, a CD-ROM drive, the appropriate software, and \$3,000 worth of digitized elevation data on CD's, you can produce these models on your own desktop. The entire CD-based database can be purchased from SoftWright (12033 East Ohio Avenue, Aurora, CO 80012); they're nice folks and easy to deal with. The topographic data are available for the contiguous 48 states, Hawaii, Puerto Rico, and the Virgin Islands. Individual quadrangles worth of elevation data can also be purchased at \$50.00 per quadrangle from RockWare (4251 Kipling St., Suite 595,

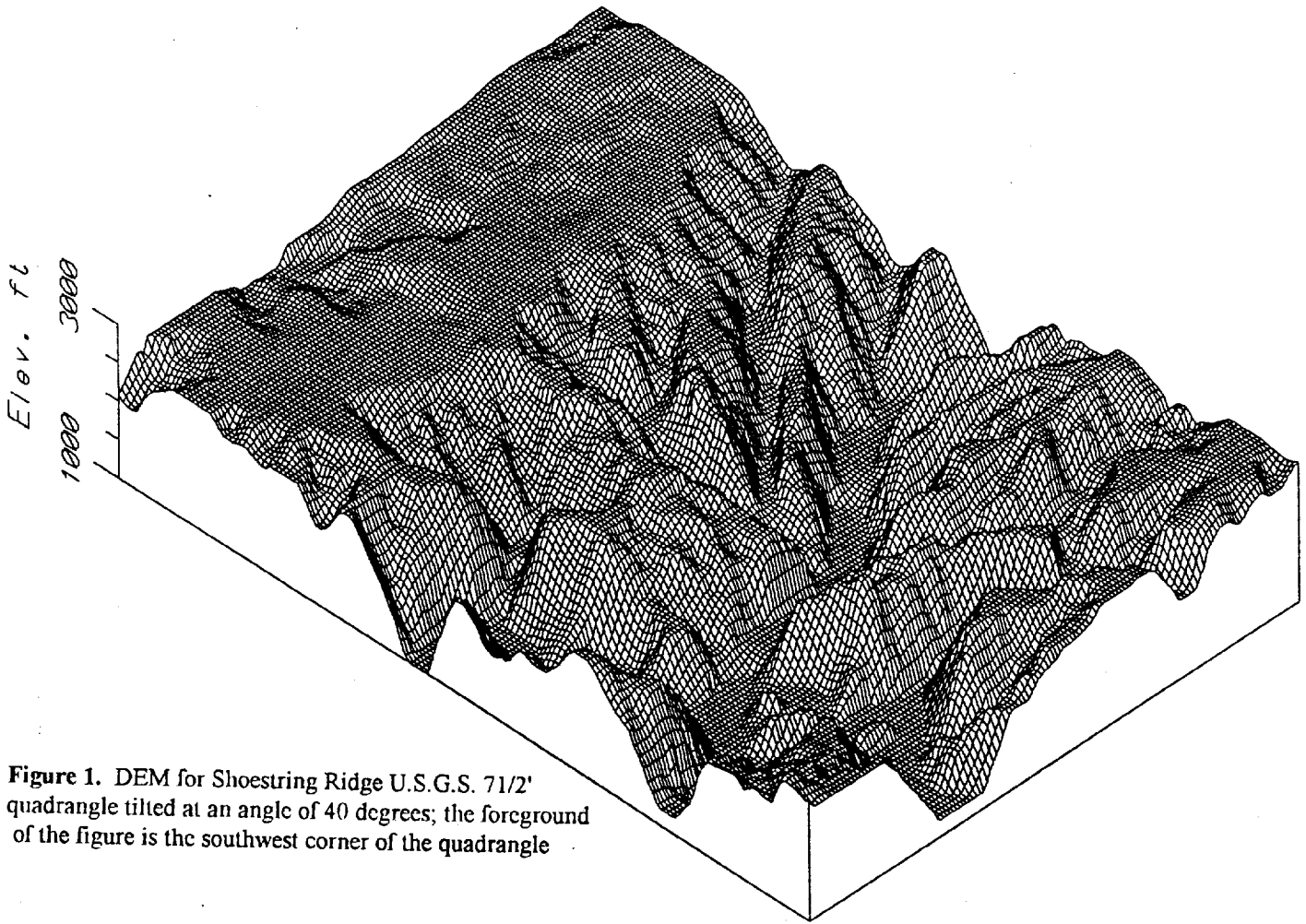


Figure 1. DEM for Shoestring Ridge U.S.G.S. 7 1/2' quadrangle tilted at an angle of 40 degrees; the foreground of the figure is the southwest corner of the quadrangle

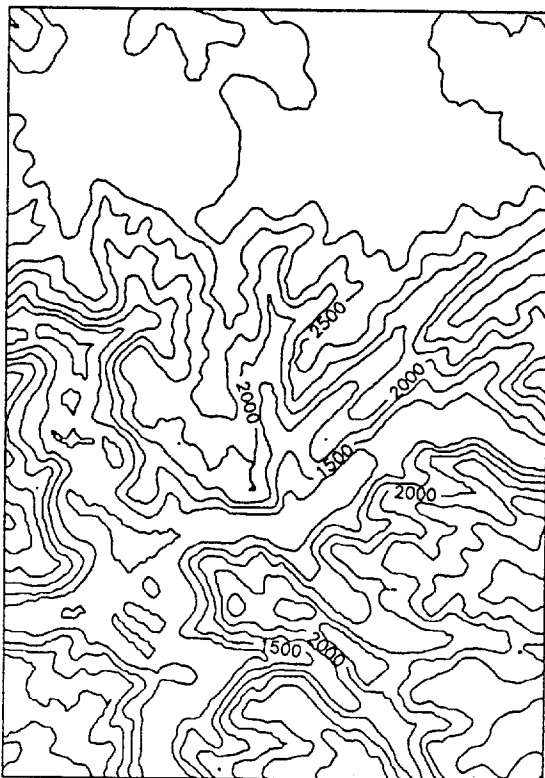


Figure 2. Contour map of Shoestring Ridge U.S.G.S. 7 1/2' quadrangle.

Wheat Ridge, CO 80033). I've been looking for these data for years, but only recently has the right combination of software, CD-ROM topographic data (the data were originally stored only on magnetic tapes for mainframes), and affordable microcomputer hardware finally become available.

Figure 1 shows a DEM for the Shoestring Ridge U.S.G.S. 7½' quadrangle tilted at an angle of 40 degrees; the foreground of the figure is the southwest corner of the quadrangle. The model can be easily manipulated so that it can be viewed from any perspective.

The contour map pictured in figure 2 was constructed from the same database as the model in figure 1. Although I set the contours in this model for 250 ft, it would have been simple to use a different interval. The John Day River runs through the canyon in the southwest quadrant of the map.

Even though I've portrayed the topographic data in standard U.S.G.S. map sizes, it's quite practical to carve out any geographic area from the overall database. For regional studies, these data can be used to easily create instant topographic maps or DEM's tailored to your specific project needs or personal whimsy. With a grid spacing of about

100 m, these elevation models may be useful for regional studies but lack the resolution to generate anything other than small-scale, low-detail archaeological site models. The same techniques used to construct these elevation models can also be used, however, to build site-level elevation models. The data need only be collected as XYZ coordinates during field surveys. Alternately, existing site maps can be converted to a digital format with a digitizing tablet. The Z-value is, of course, not limited only to elevation data, and the XY values can be any scale of Cartesian coordinates that will accurately locate the Z-point. Any valid archaeological spatial data can be used as the XYZ values and transformed into a trend surface that can be portrayed using these digital modeling methods. I've personally found these techniques quite useful for looking at regional prehistoric obsidian procurement patterns; the same concepts would also be equally useful for portraying other regional archaeological phenomena and various intrasite relationships. It appears to me that at least a portion of the archaeological future will be a digital one. Once archaeologically-related data are more widely available in this microcomputer-friendly digital form, we'll be likely to see considerably more use of techniques like the digital elevation models pictured here.

SHPO NEWS

SHPO CHANGES

Dave Talbot has resigned as Director of Oregon State Parks. The Governor has appointed Nancy Rockwell as the acting director until the position is filled. Nancy is also the acting SHPO during the transition period. James Hamrick is still Deputy SHPO. The new director should be coming on board before the end of the year. Henry Kunowski is now doing the historic side of review and compliance. Elizabeth Potter will continue to work on selected small review and compliance projects in her areas of interest (CCC, bridges). It looks like Jan Prior will make it though the downsizing this time. The SHPO is trying to get a temporary planner under 100% federal match and 45% of that person's time will be devoted to review and compliance and the site files. Douglas Dodd will continue working under contract on the State Tax program through September and we will have an intern from the OSU graduate program in museum administration working for Elizabeth Potter.

OREGON ARCHAEOLOGY WEEK

September 11-19, 1992

Please contact the SHPO if you want to be a participant in the 1993 Archaeology Week events. If you can contact them before November 30th of this year they may be able to get your event into the **Oregon Events Calendar** published by the Oregon Tourism Division. This calendar is sent nationwide. The SHPO must submit its application entry for the calendar before December 7th, 1992. This does **not** mean you cannot volunteer after Nov. 30th, it just means you will miss the chance to be in the Events Calendar. The SHPO will make a flyer of events regardless of entry dates sometime in 1993.

Sample Events Include: cultural hikes; tours; field trips; living history demonstrations; Native American dances; Native American arts & crafts; public talks, lecture series, public video or film; flintknapping demonstrations; special museum exhibits, tours, open houses; visits to archaeological projects; demonstrations of Indian weapons and tools, Ethnobotany presentations, hikes and exhibits; elementary

