



## Eel River Recovery Project

### Minutes of Round Valley Education Committee Meeting

Round Valley Covelo Library Commons

January 21, 2024 Noon – 4 PM

Attendees: Lorne Elkhorn, Robbie Wyre, John Dylan, Ron Lincoln Sr., Ron Lincoln Jr., John Cunaan, Robert Cunaan, Cathy Warren, Mudcat Hoaglin, Jackson Britton, Suzanne Maiarle, Patrick Higgins, Lourance Hall, Rachelle Bye, Aaron Wilson, Aiana Hoaglin, Bailey Wilson, Trista Freeman, John Marshall, Thomas Ochsner



**Figure 1. Round Valley Education Committee meeting attendees. January 21, 2024.**

Convening: Eel River Recovery Project Managing Director Pat Higgins opened the meeting of the Round Valley Education Committee. He welcomed everyone and explained the purpose of the meeting, which was to inform the community about the results of a Department of Water Resources (DWR) Urban Stream Restoration Program (USRP) grant, which is co-sponsored by the Round Valley County Water District (RVCWD). ERRP hopes to stimulate awareness about restoration of Mill Creek and all its tributaries, including Town Creek, and win cooperation and wider participation from landowners. ERRP also recently hosted a Round Valley Creek Trash Cleanup, and would also like to promote more community discussion of how to abate the problem of garbage in streams.

Town Creek Restoration and Education Project Background: Pat then made a presentation regarding the history of the DWR USRP grant, including previous grants from the Mendocino County Fish and Game Commission that allowed work with Round Valley Elementary School (RVES). Teacher Hannah Scherzer (Figure 2) said that ERRP should help get resources to involve RVES and the community in restoring Town Creek and a plan was created in 2018.



**Figure 2. RVES teacher Hannah Scherzer with ERRP Outreach contractor Isabelle LeMieux. 10/23/18.**

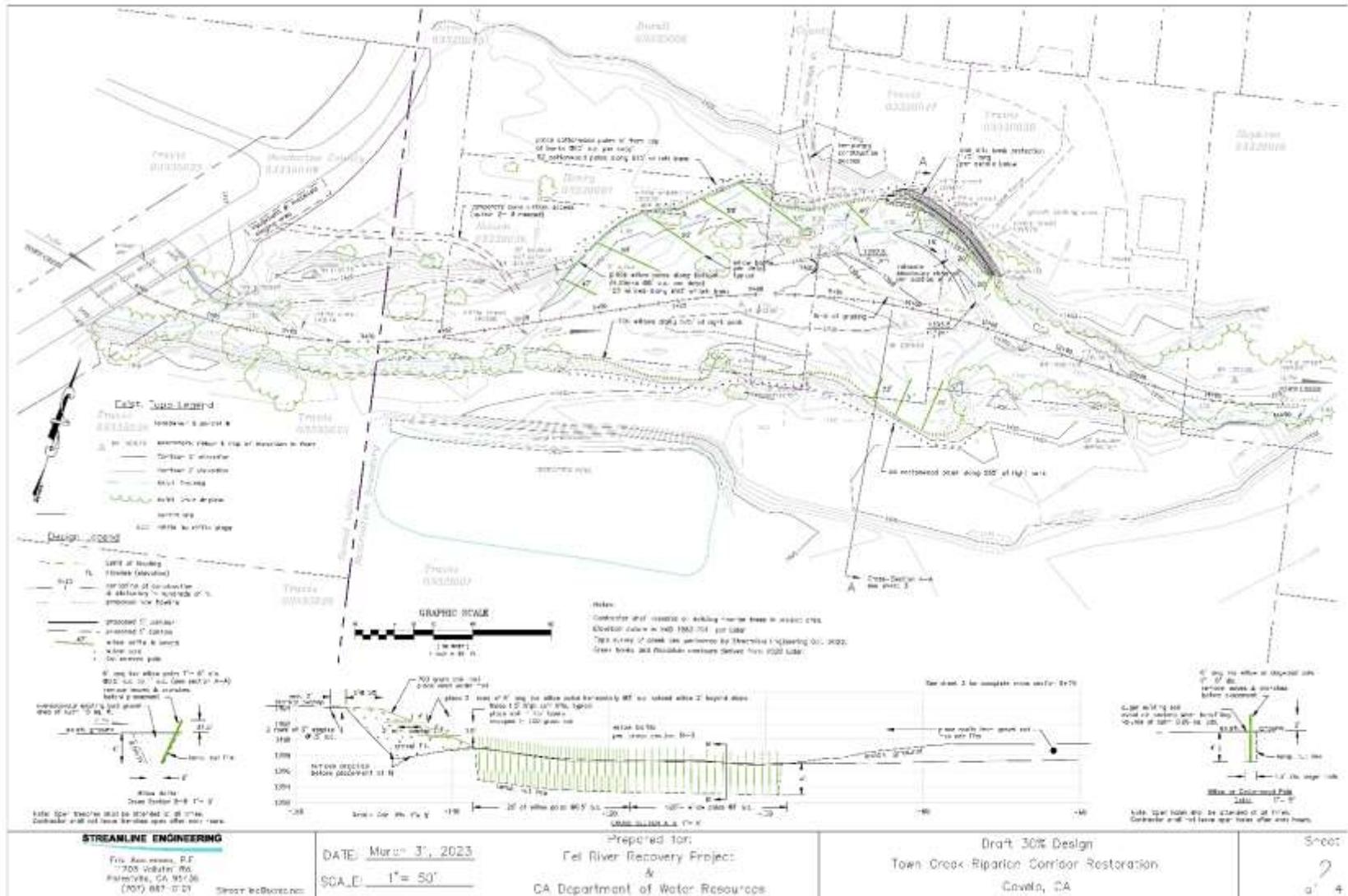
At a meeting of the Round Valley Education Committee on August 10, 2019, Imil Ferrara recommended that ERRP pursue a DWR USRP grant to fix Town Creek below Airport Road, where bank erosion on the north bank had the potential to re-route into Covelo. ERRP Board members went to the site and met enthusiastic landowner Jimmy Durall and decided to pursue the grant. The application was filed by the end of August and in December, ERRP was notified of selection. Due to covid, ERRP was not able to open the *Town Creek Restoration and Education Project* grant until April 2021.

The original design for the restoration project by Bioengineering Associates was for boulders and large wood to be placed in the channel of Town Creek below Airport Road to protect the banks. Structures would have large amounts of living willow embedded that would be irrigated to ensure survival. After ERRP obtained Landowner Agreements from riparian property owners, DWR changed requirements to include deed restrictions that prohibited the of sale of their property without permission from the State, and prohibited loans from being be taken out on the restored area of the property. Landowners rejected the deed restrictions and ERRP negotiated a planning and permitting only contract amendment. Eric Austensen of Streamline Engineering joined the design team to create engineered drawings DWR required, and recommended changing to a bio-technical approach using only willows, cottonwoods and stream aggregate (Figure 3) and no imported boulders or logs. The new design is easier to get permitted by regulatory agencies, offers a real opportunity for schools to participate in a meaningful way, and there is interest from the RVCWD in applying similar prescriptions to all erosion and elevated flood risk sites across the Round Valley floor within their jurisdiction.

ERRP has been actively engaged with RVES and Round Valley High School (RVHS), with students participating in monitoring and restoration at the Town Creek site. Students are collecting trend data on the diameter of rocks from the bed of Town Creek (D50), which is an index of sediment transport and suitability for salmon and steelhead. They have also visited streams on the Reservation to sample aquatic invertebrates and to assist with water temperature monitoring to better understand their condition.

In March 2023, restoration experts Chris and Stephanie Tebbutt helped RVES and RVHS deep plant cottonwood and willow trees (Figure 4) on the property of James Durall in the project area. This is an important experiment that will help understand whether deep planted cottonwoods can survive without irrigation. Students numbered all the trees and collected baseline data on all trees to assess growth and survival. Students also planted willow trees (Figure 5) by pounding stakes into stream banks and sediment deposits on the bed and will be helping map where there are cottonwoods and willows that could be used for restoration.

Figure 3. Town Creek Restoration Project 60% Design



**STREAMLINE ENGINEERING**

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DATE: March 31, 2023  
SCALE: 1" = 50'

Prepared for:  
Fel River Recovery Project  
&  
CA Department of Water Resources

Draft 30% Design  
Town Creek Riparian Corridor Restoration  
Covina, CA

Sheet  
2  
of 4



**Figure 4. RVES students help bury cottonwood pole to make sure there is no air pockets in soil.**

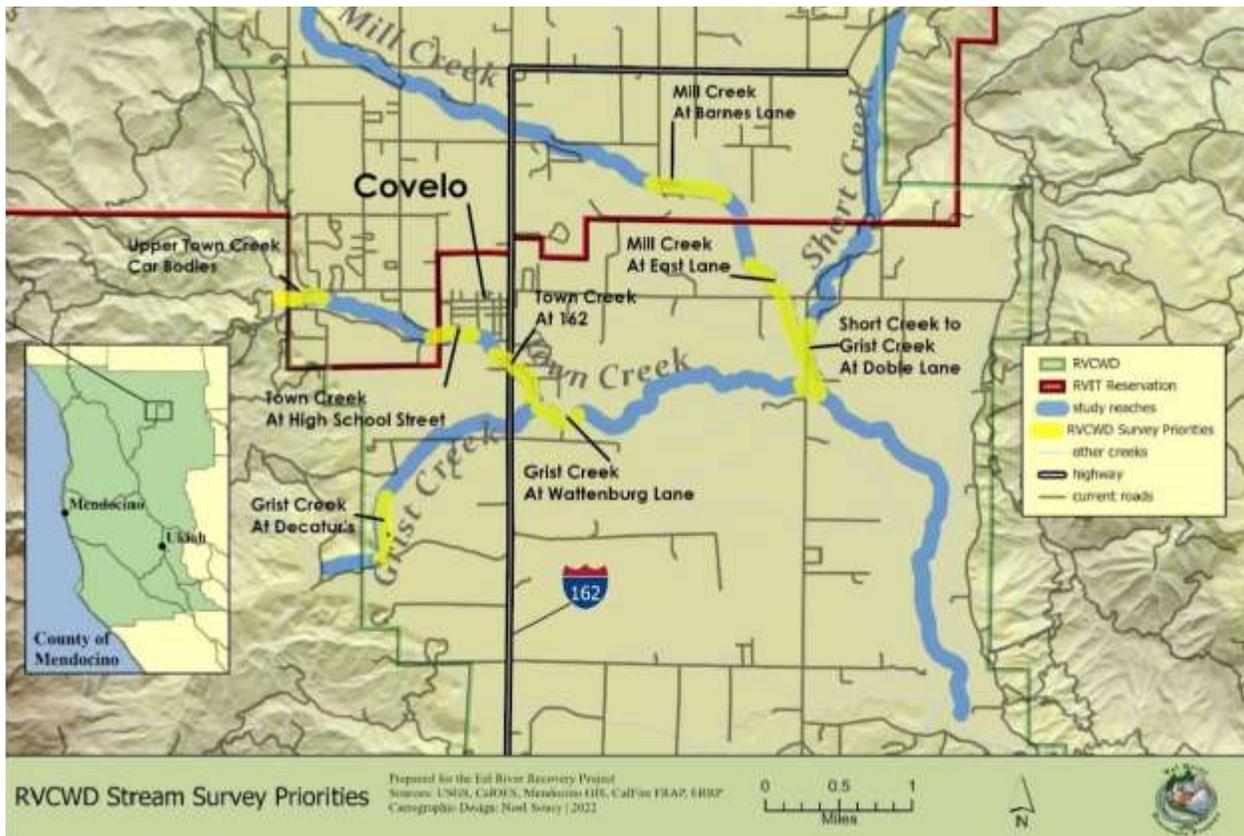


**Figure 5. RVHS students planting willow stakes under direction of Stephanie Tebbutt. 3/10/23.**

ERRP is working on getting permits from the California Department of Fish and Wildlife, the North Coast Regional Water Quality Control Board, the Army Corps of Engineers and the National Marine Fisheries Service and they are expected to be in place by June 1, 2024. As part of the project, ERRP will conduct an upland watershed assessment to discern why there are chronic problems in the Mill Creek watershed with excess sediment transport, elevated flood peaks, and decreased base flow. Findings and recommendations for remediation will be included in the in the *Town Creek Project Final Report*.

The RVCWD is considering applying for a Cal Trans sediment mitigation grant to implement the Town Creek bioengineering project, and to do planning for remediation for other creek reaches identified by the RVCWD where there are problems with bank erosion and heightened flood risk (Figure 6). The planning exercise would include full involvement of the Round Valley Indian Tribes whose Reservation overlaps with the are designated by the Mendocino County as the RVCWD jurisdiction. A second round of Cal Trans funding would be sought subsequently to implement all projects previously planned and permitted. ERRP will be helping provide information to the RVCWD and RVIT that could be used in grant applications, including lists of potentially cooperating land owners and where restoration materials like living cottonwoods, willows and other native tree and plant species are located.

Trash Clean Up and Further Need for Action: Lourance Hall talked about involving hundreds of RVES students in a Round Valley Creek Clean Up on October 27, 2023 (Figure 7). Students were taught about the impacts of litter and pollution from the local level, to the Eel River watershed scale, and even the ocean and the Pacific Garbage Patch connection in advance of the clean-up. On Saturday, October 28 volunteers picked up more than two tons of trash from Mill Creek and its tributaries (Figure 8), but it was evident the scale of the problem was too large for volunteers to address. Although ERRP cannot play a lead role in attacking this problem, it wishes to engage the community in discussion to see if solutions emerge. The problem of old car bodies and truck tires being used for bank stabilization has left a legacy problem that will be addressed by future restoration projects. Abandoning of junk cars in streams and riparian areas is a major component of the trash problem and may need special focus.



**Figure 6. RVCWD potential biotechnical project treatment reaches.**

Pat Higgins then opened the floor of the meeting for discussion of community involvement in restoration of streams on the Round Valley floor and how the trash problem might be addressed, not just in cleaning up trash, but also in changing behaviors so the problem does not recur.



**Figure 7. RVES second graders celebrating a successful Town Creek clean up. 10/27/23.**



**Figure 8. Volunteers cleaning plastic likely from cannabis greenhouse. 10/28/23.**

Community Discussion/Stream Restoration: Ron Lincoln Sr expressed the need for willow types for basket materials to be incorporated in the Town Creek project, especially given the proximity to schools for future harvesting and use. Pat Higgins said that ERRP could incorporate willow strains that provide optimal materials for basket making, if a source of cuttings could be identified. Since the project will take thousands of willows to construct, not all the willows will be of the favored basket making type, but patches could be marked and used later for gathering.

Jackson Britton asked how much historical research was being done regarding the nature of the Round Valley creeks before disturbance. He suggested that the streams once meandered across the valley floor through a vast inter-connected wetland network prior to European influence. Streams have been profoundly altered, with channels straightened to create what are essentially drainage ditches by landowners and the Army Corps of Engineers and maintained by the RVCWD, largely for the benefit of farming and development. Pat Higgins acknowledged that desired future conditions could include re-meandering streams and rebuilding wetlands, but short-term objectives were to improve the ecological function and sediment and water transport of existing channels. It was suggested that flights over the valley in summer, or drones, could be used to see where creek channels were originally.

Robbie Wyre, who serves on the RVCWD Board pointed out the need for landowners and the District to be able to access streams and manage gravel with an on-going permit so problems don't recur after restoration. He used the example of Grist Creek at Cemetery Lane as a reach where gravel management had occurred and stream health improved. Robbie noted, however, that this reach of Grist Creek had been relocated circa 1926 and was not in its original bed. He then brought up the idea that sediment that was causing problems in Town Creek, Mill Creek and other tributaries could potentially be captured to augment top soil on farming and grazing land by routing low energy flows into flat fields adjacent to low gradient channels. Robbie has seen top soil build up on his property after floods, and cited a successful large-scale farm land restoration in Santa Ynez River valley following the Great Depression.

Robert Cunaan has a large parcel that has never been developed and has two streams running through it with mostly native riparian trees and shrubs. He has offered to let ERRP and RVHS students come and collect native tree saplings and seedlings that can be put in containers and grown in the RVHS greenhouse for future use in restoration projects. Robert shared his vision for trails paralleling the creeks on the Round Valley floor where restoration of native plants that are culturally important could help create a Medicine Trail. In addition to medicinal plants, edible plants and those used for fiber could be included, making the trail system like a big Indian garden. Pat acknowledged that some might be threatened by the prospect of public access on their land, but noted that Robert's vision is long term and multi-generation and could only go forward with landowner buy-in. Robert likened the trails on the valley floor to a tree of life and talked of the benefit of exercise and exposure to Nature that could help heal the community.

Possible leaching from old sewer lines and septic systems pollution groundwater and creeks was broached. The RVCWD is aware of this and is addressing through a DWR groundwater grant. The district is also working to develop a groundwater protection ordinance.

Community Discussion/Trash Clean Up: Everyone agreed that there was an on-going problem with trash dumping, including in Round Valley creeks. Not all reaches are affected equally, although the problem is widespread. Mill Creek near Crawford Road was specifically mentioned. Several people brought up the rising cost of going to the dump as a factor forcing some people to dump their trash, and there was widespread support for subsidizing dump fees, but this is likely not politically viable. A Clean California dump week sponsored by Caltrans in August of 2022 was hugely successful but funding for that program has been discontinued. Everyone agreed that more free dump days are needed, but the best local organizers could get out of Caltrans in 2023 is sponsorship of a one-day event given the lack of Clean California funding. Attendees agreed that at least one free dump day per quarter is needed. During ERRP clean ups on Oct 27-28 it was observed that most of the trash in and along the streams was near the bridges at Town Creek and Mill Creek on Highway 162. Robbie suggested that using temporary, floating netting at Mill Creek bridges could be used at the first high flow in fall to capture trash quickly and effectively.

ERRP is targeting old car bodies and truck tires used to stabilize banks historically for removal as part of future restoration, but continuing dumping and abandonment of vehicles in creeks and riparian zones continues. Increase enforcement was one solution offered, but the mixed jurisdiction of public and Reservation lands creates problems with lines of authority. One vehicle tracked by ERRP immediately above Highway 162 in Town Creek took more than nine months to be removed from the channel (Figure 9) and all agreed that more rapid response was needed. Lourance pointed out that CHP contracts that pay towing companies to remove vehicles from creeks sometimes lapsed. Also, tow trucks can easily remove cars from the streets of Covelo but removal from creeks was complicated. This suggests that getting cars out of creeks and placing where towing companies can collect could be a partial solution. Cars are also being abandoned in riparian zones along with other appliances (Figure 10). A partial solution to this could be salvage of the car bodies for scrap metal, but that depends on demand from China, and recent prices have not been high enough to subsidize their removal.



**Figure 9. SUV in Town Creek channel upstream of Hwy 162.**



**Figure 10. Abandoned vehicles and appliances on upper Town Creek.**

Pat and Lourance related information from a discussion with RVIT Executive Director Jim Russ who supplied some historical facts about extensive action the Tribes have taken to abate the trash problem. A complicating factor is that the problem recurs and it gets harder to get resources to clean up the same problem. Also, the practice of burning cars creates toxic waste that needs special handling. For example, the RVIT has \$500,000 in grants lined up for clean-up, but \$100,000 of that amount will be needed for dealing with toxics. Jim pointed out that the trash problem occurs on private land as well as Reservation land and that RVIT was open to partnerships with the community to abate the problem. Attendees at the RVEC meeting all felt that education was needed to stop the cycle of pollution and people using streams as dumps and it sparked further discussion about education.

Community Discussion/Education: Education is a key component to breaking the cycle of trash dumping in Round Valley creeks. Lourance Hall, who is the Outreach Coordinator for ERRP working with RVES and RVHS, said that the educational efforts leading up to the trash clean-up had reached students, especially younger ones. She has won a Mendocino County Community Foundation grant to do an art project with RVES that will use safe, reclaimed pieces of trash to make works of art for a RV Earth Day Celebration. The classroom message will be to recycle and reuse items or to dispose of them properly and to compost organic material. Although this year's RVES art event is invaluable, curriculum materials are needed so the same lessons can be repeated by teachers whether every year in the future whether there are grants or not. RV is somewhat hampered in terms of recycling, as there is currently no buy-back of cans and bottles locally. It was suggested that there might even be larger scale trash "gardens" that could be public art spaces.

Jackson Britton said that schools need to teach about the hazards of industrial agriculture in terms of nutrient pollution and pesticides, as opposed to smaller scale organic agriculture and traditional Native American land management. Lourance noted that there had been a real shift in RVHS agriculture classes and more widely over the last 10-15 years, with students being taught about conservation methods that can be employed in farming and ranching. She mentioned building fences to keep livestock out of creeks, implementing water conservation and preventing soil loss through a transition to no-till farming. Teaching about forest management is also changing, with a shift of emphasis from logging to managing for forest health.

Community Discussion/Need for Career Tracks: Lorn Elk Horn said that to get students on the right path and to change bad behavior that they needed to be offered career and exposed at an early age at the elementary school level. Lourance pointed out that this could help prepare RVHS students for the Natural Resource Career Technical Education Pathway that would span their entire time in high school. This includes not just classes but leadership opportunities, development of individual projects, and competition at local, regional and state levels. ERRP is now getting students involved in GIS mapping of car bodies, cottonwoods, and willows as well as stream flow, rainfall and aquatic monitoring. We are also involving students directly in restoration hoping that some may want to make a career of it. ERRP is reaching out to natural resource professionals to share their passion for their work and creating a presentation for RVHS. Some experts will Zoom with students or join them in the classroom or the field.

Forest health is also a potentially emerging field for employment, and students can connect there by joining the California Conservation Corps or attending the Academy of the Redwoods to start careers with CALFIRE. Many in Covelo would like to see the U.S. Forest Service provide summer internships that can stimulate interests in careers, and there has been discussion with Ranger Frank Aebly and local staff Jared Prado. Trails in the Mendocino National Forest are in neglect and summer jobs with the USFS could help improve access. ERRP plans to participate in the RVHS Career Day on March 8, 2024.

John Cunaan made a presentation about how he was turning “trash” into furniture and art, taking wood from forest health thinning that would otherwise be burned. He spoke of the need for vocational education where students learned to craft wood or to build houses out of small diameter wood in parallel with forest health implementation. With the loss of ROP funding, there is now a push toward college education that leaves many students out. They then default to the path of least resistance rather than identifying passions and niches of interest due to lack of support for those not college bound after high school. Stream restoration as a multi-generational practice falls in to this.

Mudcat Hoaglin expressed gratitude to ERRP for leading Native WAY field trips to the Middle Fork, Williams Creek and the North Fork. He saw the student’s eyes opened, but he and other adult chaperones also learned things they didn’t know about like aquatic insects. Mudcat wants to see similar programs continuing, connecting RVIT youth and adults to Nature. ERRP will be working to establish trips to the Wildlands Conservancy Eel River Preserve for youth and adults, and to also possibly explore Anthony Peak/Hatchet Mountain for the view of watershed.

The meeting was adjourned at 4 PM.



Suzanne Maiarle admires one of John Cunaan’s “talking sticks” after RVEC meeting.