well-established relationship with the homeless, and that is where their energies will be focused—counting those hardest-to-count individuals, the wandering homeless who all too early slip into invisibility.

That is exactly the sort of commitment, dedication, and civic partnership the census requires. This is (as we in Akron say) ''where the rubber meets the road''—finding, identifying, and counting those who lack basic shelter.

For three generations, the Thomas family has guided the Haven of Rest with a deep and abiding sense of the dignity and worth of every individual. They understand and live the creed that everyone matters and every one of us counts.

I commend them for their caring, and for their inspirational demonstration of what ''civic duty is really all about.

INTRODUCTION OF DILLONWOOD GIANT SEQUOIA GROVE PARK EXPANSION ACT; AND GIANT SEQUOIA GROVES PROTECTION AND MANAGEMENT ACT OF 2000

HON. GEORGE RADANOVICH

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

Thursday, March 16, 2000

Mr. RADANOVICH. Mr. Speaker, today I am introducing legislation to preserve some of America's greatest treasures—the giant sequoias of central California.

The first bill I am offering would expand the boundaries of Sequoia National Park. There is an area called Dillonwood Grove that includes one of the riches sequoia groves in the region. The private owners want this tract to become a part of our Park system and I support their right to do that. This bill would authorize the change.

The most compelling thing about Dillonwood, however, is that this private property has been actively managed for many years and it offers us living proof to the advantages of flexible forest management. While Dillonwood will enter into the Sequoia National Park, it is important to look at the management lessons from Dillonwood, as we seek to protect, restore and maintain the sequoia groves outside of the Park.

The President thinks the best way to do this by designating a 400,000-acre national monument. I disagree.

First, the giant sequoia in the Sequoia, Sierra and Tahoe Forests have been off limits to logging for over 10 years! A Mediated Settlement in 1990 set aside these groves to permanently ensure their protection. President George Bush signed a proclamation in 1992 to state the policy for management to be to protect, preserve and restore goods for giant sequoia groves in national forests. In fact, over 80% of the Sequoia National Forest is already off limits to logging.

The scientists also disagree. In 1996, the Sierra Nevada Ecosystem Project said the best way to keep the forest healthy was through active management of the groves. They did not recommend a monument. In addition, the Giant Sequoia Ecology Cooperative has advocated a flexible and adaptive management strategy. A monument designation would undermine this kind of flexibility.

I would like to introduce a letter into the RECORD from Dr. Douglas Piirto, a Professor of Forestry and Natural Resource Management at Cal Poly, in San Luis Obispo, California. He has been working on giant sequoia health for almost thirty years and is very concerned about how monument status will undermine forest management flexibility. I would encourage my colleagues to read his thoughtful recommendations.

Unfortunately, the Administration has completely ignored all of these scientific findings. And the Forest Service has done little to implement them.

Instead, what we now see is an election campaign driving forest policy. The campaign pollsters say we should lock it up! But this is not in the best interest of these sequoia groves—it is only in the best interest of one election campaign.

This second bill would authorize a National Research Council study of the forest. They should review past studies and offer recommendations for exactly what kind of management will preserve these treasures. The National Research Council offers us some of the best independent scientific review in the world and I hope the Administration will listen to them.

This should be about the health of the forest, not the health of an election campaign.

If we really care about the future of the giant sequoia, then we will listen to the scientists. Campaign spin doctors and their polls cannot and should not try to manage a forest.

MARCH 7, 2000.

Re Antiquities Act and Giant Sequoia Groves: Giant Sequoia—a Relic of the Past or an Icon to the Future

Hon. William Clinton,
President of the United States,
White House, Washington, DC.

DEAR PRESIDENT CLINTON: I write this letter with a highest degree of urgency and respect for your office. You are about to make a decision that NBC states in their 2/16/2000 news story could impact the long-term survival of giant sequoia trees. They are right but not in the context that they say it. Deciding to create a national monument for the giant sequoia groves that occur on national forest lands will result in the creation of places where ''relics'' of giant sequoia are featured. To think that simply drawing a line around a giant sequoia grove and stopping all management activity is in the best interest of the long-term survival of giant sequoia is incorrect. I fully disagree with any attempt to put the national forest giant sequoia groves in national monument status. A flexible range of management is needed that cannot occur if they are designated only as national monuments or national parks. I reach out to you at this time with the greatest degree of humility I can muster. There is no scientific justification in my opinion to designate giant sequoia groves on national forest land as national monuments. Our common interest is to see that they receive the best stewardship possible. So, as much as we may differ on a variety of issues, I need to have your attention for the next few minutes as I make my case regarding the future of giant sequoia groves.

I have organized this letter into the following sections: A Win/Win Solution; My Credentials, Interest, and Role in Giant Sequoia Management; The Problem As I See It; Why the Need for a Flexible Range of Management; What the Politics and Science Tells Us; Conclusion, and Selected References from my Curriculum Vitae. The recommendations presented in the Win/Win Section of this letter are supported and expanded upon by the information that is presented in the sections which follow it.

Please refer to the figure attached at the end of this letter before proceeding with reading the Win/Win Solution section of this letter. They say a picture tells what a 1,000 words can't do. The figure of the Confederate Group in Mariposa Grove illustrates what can happen to vegetation within a giant sequoia grove over an 80-year period. This letter makes the case that significant management flexibility is needed to respond to the dramatic changes in vegetation that can occur in giant sequoia groves.

A WIN/WIN SOLUTION

Let's first start with what I think most informed people agree on: (1) Some people might debate the meanings of the protect, preserve, and restore goals for national forest giant sequoia groves as specified in the 1992 Presidential Proclamation but most citizens would, I think, largely agree with their intent; (2) some type of management area designation featuring giant sequoias may be appropriate; (3) the subwatershed basin containing the giant sequoia grove should be the area that is specifically identified to receive a specific management area designation; (4) flexible/adaptive management, including fire surrogate methods (*e.g.*, selective thinning to reduce risk of catastrophic fire occurrence) is needed given the many different conditions that exist in national forest giant sequoia groves; (5) Management must be tied to science; (6) Adequate funding must be provided to support management and research work; and (7) The role of the Giant Sequoia Ecology Cooperative should be reinforced and expanded with an adequate funding mechanism to support an Executive Director, staff, office space and associated costs for managing the Cooperative. So if it follows that there is widespread agreement on these 7 main items, then I would suggest the following management actions be addressed:

1. Expand on the 1992 Presidential Proclamation by issuing a 2000 Presidential Proclamation directing the Forest Service to provide protection, preservation, and restoration work to the lands within the sub-watershed basin containing the giant sequoia groves. Ask Congress for approval of your proclamation if possible to gain a broader spectrum of support. Approximately 19,345 acres exist with the tree-line areas of the 38+ giant sequoia groves that occur on the Sequoia National Forest. Increasing management attention to the subwatersheds that contain the giant sequoia groves would increase this special designation status to about 100,000 acres on the Sequoia National Forest. I recommend that the remaining 300,000 acres be released from management area special designation which would respond to concerns expressed by the local forest products industry.

2. I recommend a designation other than national monument. National monument connotes to me the idea of preserving relics rather than adaptively managing ecosystems. The Forest Service has a large number of special designations it uses for the lands under its jurisdiction. One of those designations, I think, should suffice. The important thing is that a subwatershed area is identified for each grove that will fall under the three goals of protect, preserve, and restore.

3. The goals of protect, preserve, and restore should be expanded to include the Sierra and Tahoe National Forest groves.

4. Some further refinement as to the meaning of protect, preserve, and restore might be appropriate. I know they are referred to in the 1992 proclamation but the wording of any

new proclamation must account for the current variety of conditions in the Sequoia, Sierra, and Tahoe groves. Please refer to the report titled ''An Ecological Foundation for Management of National Forest Giant Sequoia Ecosystems'' for further clarification.

5. The role of the Giant Sequoia Ecology Cooperative must be further defined, reinforced, and supported with staffing and funding. This important body has begun to make a difference but its efficiency could be improved with renewed and expanded support from the President. This will insure a cross-section of scientific support for the work occurring in all giant sequoia groves whether within state of federal jurisdiction.

6. Some direction as to how to bring about management in the 38+ national forest giant sequoia groves should be included in the 2000 Presidential Proclamation. For example, it would be an overwhelming task to write an EIS document for each national forest giant sequoia grove. So, specific direction laying out the actions necessary to move to projects within national forest giant sequoia groves, I think, is needed.

7. No matter what the 2000 Presidential Proclamation specifies, very little will be achieved without adequate funding and staffing. Drawing a line around giant sequoia groves does very little for their long-term sustainability.

8. Provide funding for a 2002 giant sequoia symposium. The Forest Service along with other agencies sponsored the highly effective 1992 symposium.

9. Finally, I think some credit must be given to the Forest Service for the work they have achieved to date. We know more today about national forest giant sequoia than ever before. That is because of the work they and others have done. No organization or agency is perfect. But the morale of an organization can be severely degraded when allegations are made that are not supported by science and experience. Organizations get better with proactive leadership that builds on the strengths, skills, and abilities of the people that comprise them.

The information which follows provides support to this Win/Win solution.

MY CREDENTIALS, INTEREST, AND ROLE IN GIANT SEQUOIA MANAGEMENT

My name is Dr. Douglas D. Piirto. I am presently a Professor of Forestry and Natural Resources Management at Cal Poly, San Luis Obispo. I am a Registered Professional Forester and Certified Silviculturist in California. My experience with giant sequoia and coast redwood started in 1972 and continues to the present. I have dedicated my career to furthering our knowledge about these two magnificent species with a major focus on giant sequoia. My Ph.D. work at UC Berkeley was focused on ''Factors Associated with Tree Failure of Giant Sequoia.'' I published six papers based on my Ph.D. dissertation.

My experience with giant sequoia since completion of my Ph.D. work is extensive. I have worked as a Forest Manager on lands that contained giant sequoia groves. I have developed giant sequoia grove management plans, completed over $1,000,000 in research projects over the past 28 years focused on giant sequoia, have two major giant sequoia research projects ongoing, and have just finished a major report for the USDA Forest Service titled ''An Ecological Foundation for Management of National Forest Giant Sequoia Ecosystems. I am well acquainted with almost all aspects of giant sequoia management, the public issues, and scientific information. For example, I annotated over 175 scientific articles for the recent report I just finished for the Forest Service. So, I speak with a significant amount of background regarding giant sequoia that has help up to the peer review process.

Further, I was actively involved in the planning and execution of the 1985 shortcourse titled Management of Giant Sequoia sponsored by the USDA Forest Service and the Society of American Foresters. I served as an expert witness for the 1991 Congressional Hearing on management of national forest giant sequoia groves. I was actively involved in the planning and execution of the 1992 Giant Sequoia Symposium which occurred as a result of recommendations made at the 1991 Congressional hearing. At that same time I completed a major study for the National Park Service titled Biological and Management Implications of Fire Pathogen Interactions in the Giant Sequoia Ecosystem.

My current research, funded by Save the Redwoods League and Sierra Forest Products focuses on evaluating vegetative structure of a highly altered giant sequoia grove (e.g., Converse Basin) and the Redwood Mountain Grove, a grove which has only had prescribed burning. We are obtaining some fascinating management oriented results from this study.

I present my comments, opinions and recommendation in this letter as a Cal Poly representative to the Giant Sequoia Ecology Cooperative, a group of managers and managers focused on linking science to management policies. The points I make in this letter are based on years of experience and interaction with many learned individuals. The comments I make should only be construed as my point of view and not that of the collective body of Cal Poly or of the Giant Sequoia Ecology Cooperative. However, having now said that, my opinions presented here are widely supported particularly my views on the need for an adaptive, flexible management strategy that is focused on the subwatersheds containing giant sequoia groves. Please refer to the Congressional Testimony I presented in 1991 that specifically outlines my views as to the need for a flexible management policy. Also refer to the McKinley Grove Environmental Assessment that I helped prepare in 1978. In that EA, I recommended that the subwatershed be the area that is given focused attention. These documents are listed in the Selected References which appear at the end of this letter. More detailed listing of my credentials, experience and publications appear in my Curriculum Vitae which will be provided upon request.

THE PROBLEM AS I SEE IT

Considerable discussion has and is occurring as to how to best protect naturally occurring giant sequoia groves. It is my opinion that the issue should rather focus on how to manage giant sequoia groves. However, defining what constitutes ''best'' management is not an easy matter and is subject to interpretation by various concerned individuals and organizations. I made this statement in my testimony to the 1991 Congressional Hearing on management of giant sequoia groves.

The 1991 Congressional Hearing led to several positive outcomes: 1.) the 1992 Giant Sequoia symposium; 2.) increased USDA Forest Service funding to located boundaries and inventory national forest giant sequoia groves; 3.) increased research activity on giant sequoia; 4.) 1992 Presidential Proclamation; 5.) development of a Giant Sequoia Ecology Cooperative which advises all organizations that have a responsibility for managing giant sequoia groves; and 6.) development of an ecological foundation report for management of national forest giant sequoia ecosystems. We didn't precisely know in 1990 where national forest giant sequoia groves began and ended. We do now because the 1989 Mediated Settlement followed by the 1992 Presidential Proclamation focused our attention on three objectives: protect, preserve, restore. And, increased funding led to our accurately locating the boundaries of all giant sequoia groves buffer zones, and subwatersheds. And more recently we have identified fire influence zones for several of the national forest giant sequoia groves. So to say that very little has occurred regarding national forest giant sequoia groves is a gross misstatement.

Drawing lines to exclude certain management activities is not what we as a society must focus on. Rather we must center our attention on flexible management strategies that accommodate the variety of stand conditions which exist within the proposed 400,000 acre national monument for national forest giant sequoia groves. As far as I can tell the actual acreage of national forest giant sequoia groves is something less than 19,345 acres. So, I wonder why it is necessary to reserve from use some 400,000 acres of land. Admittedly there are watershed and fire influence concerns which must be addressed but those areas outside the actual treeline areas of giant sequoia groves can be managed in such a fashion that both allows use and reduced risk of catastrophic fire or watershed events occurring within the giant sequoia groves.

And to think that one form of management is in the best interest of all the national forest giant sequoia groves fails to realize that there are significant differences in the composition and structure of the 38 national forest sequoia groves on the Sequoia National Forest. Converse Basin, for example when it was privately owned was extensively logged some 100 years ago. There have been two very large wildland fires that have also affected the Converse Basin grove as well. The structure and composition of the Converse Basin grove is thus much different from a grove that has not had this disturbance history. Thus it follows that our management approach for Converse Basin would by necessity be different from other less disturbed groves. Will establishing a national monument allow for this range of management flexibility? I think not. We must rise to higher level as we focus our attention on what is best management for national forest giant sequoia groves.

WHY THE NEED FOR A FLEXIBLE RANGE OF MANAGEMENT

Agencies are moving forward with management activities trying to ''learn as they go'' as to what works and doesn't work. For example, the California Department of Forestry and Fire Protection employs uneven-aged forest management practices (e.g., selective cutting) and prescribed burning to meet management objectives for the Mountain Home grove of giant sequoias. The USDI National Park Service employs prescribed burning focusing on fuel reduction. The USDA Forest Service was using both even and uneven-aged forest management followed by prescribed burning practices in several of the giant sequoia groves on the Tahoe, Sierra, and Sequoia National Forest in the 1970s and 1980s. The Forest Service has imposed a moratorium around 1988 on management projects in national forest giant sequoia groves until more is learned about them (e.g., inventories) and until a Land Management Plan Amendment can be developed and approved. The California Department of Parks and Recreation which manages Calaveras Bigtrees State Park employs primarily prescribed burning practices to meet management objectives. The Bureau of Land Management has recently launched a program to inventory attributes of the Case Mountain giant sequoia grove. But aside from custodial protection, BLM is not aggressively managing the Case Mountain

grove until it evaluates a suitable management strategy. The managers of the Tule River Indian Reservation employ uneven management of the giant sequoia lands that occur there. The range of management approaches varies from timber management followed by prescribed burning to only prescribed burning to custodial management to let's wait and inventory what we have at this time. Which approach is correct?

A few long-term studies have been done focused on management strategies for giant sequoia groves. The USDI National Park Service has done work on prescribed burning but not in comparison to its effectiveness to silvicultural management strategies. To say that prescribed burning for fuel reduction is the only safe course of action for all giant sequoia groves is inappropriate because it is an opinion based on limited research information. We really do not know if prescribed burning alone is the best course of action for the long-term survival and perpetuation of the giant sequoia species. Prescribed burning has both positive and negative effects on the giant sequoia ecosystems.

Understanding that prescribed burning is not without its negative consequences, some foresters employed a variety of silvicultural methods to achieve desired management objectives. Silvicultural manipulation (e.g., tree removal) has both positive and negative consequences as does prescribed burning. Competing whitewood trees are either partially or totally removed from small areas of the larger giant sequoia groves to reduce fuel levels, reduce competition, and create seedbed conditions that enable giant sequoia to become established, survive, and grow. Very few young-growth stands of giant sequoia exist in California. The ones that do exist developed as a result of past site disturbances. Silvicultural manipulation of giant sequoia groves and adjacent areas can actually increase the amount of area occupied by young, healthy giant sequoia trees.

The decision as to what is the most appropriate course of action to take with reference to the management of giant sequoia is not an easy one to make given these uncertainties. However, it seems inappropriate to put all of the giant sequoia grove areas under the same form of management. Placing the 41+/− giant sequoia groves on the Sequoia, Sierra, and Tahoe National Forests into a national monument status reduces to a significant degree management flexibility. Management flexibility is needed as we learn more about effective approaches. National monument status will insure custodial protection but will this designation ultimately lead to healthy ecosystems and perpetuation of the giant sequoia species? Do we really have enough information to suggest that only national park or national monument status will result in ''best'' management practices for the giant sequoia ecosystem? I think not. It is not yet clear what approach will be best for the species as a whole in the long-term. As such, it seems more reasonable and prudent to continue with a range of management approaches with some restrictions as to the extent of activity that can occur.

WHAT THE POLITICS AND SCIENCE TELLS US

So who's right? What course of action should we as a nation take at this point in time? What have we learned from what research and management activities that have been undertaken? The lessons learned as I see them are:

1. There continues to be significant interest in the giant sequoia resource as there well should be. Yet this interest and concern is not supported by adequate funding to do research and carry out management in an orderly and planned manner.

2. Organizations and agencies involved with giant sequoia management have varied opinions as to what is the most appropriate course of action to follow.

3. More comparative research is needed to evaluate management approaches for giant sequoia ecosystems.

4. Significant site disturbance is needed to obtain giant sequoia seedling establishment and survival. Mineral soil conditions favor seedling establishment and canopy openings facilitate growth and survival of established seedling.

5. Thrifty young-growth stands of giant sequoia are not widespread with its native range.

6. Fire suppression over the past 90 years has resulted in significant stand density increases of associated tree species found in giant sequoia groves. These changes in stand density are also influencing pathogen and insect relationships in the grove areas.

7. Both prescribed burning and silvicultural manipulation of giant sequoia groves have positive and negative effects which are not fully understood. for example, researchers have measured lethal temperatures at significant depths beneath the bark of old-growth giant sequoia trees during prescribed burning operations.

8. Custodial protection without some form of prescribed burning and/or silvicultural manipulation is probably not in the best interest for perpetuating the species

9. Giant sequoia trees are subject to the same natural forces and man-caused influences as other tree species. Specimen giant sequoia trees have fallen within the boundaries of National Parks, State Parks, State Forests, National Forests, and on private lands. Various factors are involved. And in some cases human activities have probably contributed to premature failure in all of these governmentally protected and managed areas. It is not known whether or not the present rate of old-growth giant sequoia tree failures is higher than historic patterns.

10. Both prescribed burning and silvicultural manipulation of giant sequoia groves have received adverse public criticism. It seems that no one agency is doing a perfect job of giant sequoia management. However, Mountain Home State Forest might come closest if we were to judge performance on the amount of public criticism expressed and publicity received. But the Jury is still out as to what management approaches are most effective for perpetuation of the ecosystem and the giant sequoia species.

11. Giant sequoia groves have and are affected by a wide range of disturbance events. We understand that some proportion of a giant sequoia landscape should be comprised of early stage vegetation so that sustainability and the overall health of the grove is maintained.

CONCLUSION

Management by necessity must involve more than custodial protection. And it can't simply focus on changing jurisdictional authorities. Management must be continuous as the ecosystems within which giant sequoia occurs are dynamic. Given these three premises, I make a number of recommendations as shown in the Win/Win solution section of this letter.

Changing jurisdictional authorities is not the answer. Education and research continue to be needed on giant sequoia. Positive change will occur as we learn more about this most magnificent tree species and ecosystem. I truly believe that the giant sequoia groves are not relics of the past. They should not receive protective regulations that treat them as such. Drawing a circle around the giant sequoia groves and calling them national monuments seems to infer ''relic'' status. Flexible management strategies with restrictions on the extent of management activity that can occur at any one time seems to be, in my opinion, the better approach to insure the perpetuation of the giant sequoia species and the ecosystems within which they occur. Please refer you to the Win/Win Solution section at the beginning of this letter for more specifies as to the recommendations I offer.

Thank you for giving me this opportunity to express my opinions on giant sequoia. I list in the following section selected publications, technical reports, and invited presentations in support of my credentials to express an authoritative opinion on the pending proposal to establish a national monument for national forest giant sequoia groves.

SELECTED REFERENCES

I list only peer reviewed publications, technical reports, and papers I have delivered that are focused on giant sequoia. A complete listing of all my publications and presentations appears in my current Curriculum Vitae which is available upon request.

Peer reviewed publications

Piirto, D.D., and R. Rogers. 1999. An ecological foundation for management of giant sequioa groves. USDA Forest Service, Pacific Southwest Region, Sequoia National Forest R5–EM–TP–005 (peer reviewed).

Piirto, D.D. and R. Rogers. 1999. An ecological foundation for management of national forest giant sequoia groves. In: Transactions for the 1999 North American Wildlife and Natural Resources conference. Wildlife Management Institute (peer reviewed).

Piirto, D.D., J.R. Parmeter Jr., F. W. Cobb Jr., K.L. Piper, A.C. Workinger, and W.J. Otrosina. 1998. Biological and management implications of firepathogen interactions in the giant sequoia ecosystem. Pages 325–336 in Teresa L. Pruden and Leonard A. Brennan (eds.). Fire in ecosystem management: shifting the paradigm from suppression to prescription. Tall Timbers Fire Ecology Conference Proceedings, No. 20. Tall Timbers Research Station, Tallahassee, FL. (peer reviewed)

Piirto, D.D., Robert R. Rogers, and Mary Chislock Bethke. 1997. Communicating the role of science in the management of giant sequoia groves. In: Proceedings for the National Silviculture Workshop, May 19–22, 1997. USDA Forest Service, Northeast Forest Experiment Station, Warren, Pennsylvania. General Technical Report GTR–NE–238.

Piirto, D.D., R. Thompson and K. Piper. 1997. Implementing Uneven-aged redwood management at Cal Poly's School Forest. In: Proceedings of the Conference on Coast Redwood Forest Ecology and Management, June 18–20, 1996. p. 78–82.

Piirto, D.D. 1994. Giant Sequoia Insect, Disease and Ecosystem Interactions. In Proceedings for the Symposium on Giant Sequoias: Their Place in the Ecosystem and Society. June 23–25, 1992. Visalia, California (peer reviewed).

Weatherspoon, C.P., Y.R. Iwamoto, and D.D. Piirto. (Technical Compilers). 1987. Proceedings of the Workshop on Management of Giant Sequoia. May 24–25, 1985. Reedley, CA. USDA Forest Service Gen. Tech. Rpt. PSW–95.

Piirto, D.D., J. Hawksworth and M. Hawksworth. 1986. Giant Sequoia Sprouts. Journal of Forestry. 84(9) 24–25 (peer reviewed).

Piirto, D.D. 1986. Wood Properties and Unique Characteristics of Giant Sequoia. In Proceedings of SAF's Management of Giant Sequoia workshop. USDA Forest Service Gen. Tech. Rpt. PSW–95.

Piirto, D.D., J.R. Parmeter and W. Wayne Wilcox. 1984. Basidiomycete Fungi Reportedly Associated with Living or Dead Giant

Sequoia and Coast Redwood. Univ. of California, Berkeley. Forestry and Forest Products. Dept. of Forestry, Forest Products Laboratory, California, Agricultural Experiment Station. No. 55–April.

Piirto, D.D., W. Wayne Wilcox, John R. Parmeter, David L. Wood. 1984. Causes of Uprooting and Breakage of Specimen Giant Sequoia Trees. Division of Agricultural and Natural Resources, Univ. of California. Bulletin 1909.

Piirto, D.D. and W. Wayne Wilcox, 1981. Comparative Properties of Old-Growth and Young-Growth Giant Sequoia of Potential Significance to Wood Utilization. Division of Agricultural Sciences, Univ. of California. Bulletin 1901.

Piirto, D.D. and W. Wayne Wilcox. 1978. Critical Evaluation of the Pulsed-Current Resistance Meter for Detection of Decay in Wood. Forest Products Journal 28 (1) 52–56 (peer reviewed).

Piirto, D.D., J.R. Parimeter and W. Wayne Wilcox. 1977. *Poria incrassata* in Giant Sequoia. Plant Disease Reporter 61 (1) 50 (peer reviewed).

Wilcox, W.W. and D.D. Piirto. 1976. Decay Resistance in Redwood (*Sequoia sempervirens*) Heartwood as Related to Color and Extractives. Wood and Fiber 7 (4) (peer reviewed).

Piirto, D.D., J.R. Parmeter and F.W. Cobb Jr. 1974. *Fomes annosus* in Giant Sequoia. Plant Disease Reporter 58 (5) 478 (peer reviewed).

Technical reports

Piirto, Douglas D. 1996. A Critical Review of the Kings River Administrative Study (KRAS) Landscape Analysis Plan. USDA Forest Service. Sierra National Forest, Clovis, CA.

Piirto, Douglas D. 1996. Reference Variability for Giant Sequoia—An Annotated Review of Literature. Final Report. USDA Forest Service. Sequoia National Forest, Porterville, CA.

Piirto, D.D., K. Piper and J.R. Parmeter, Jr. 1992. Final Report. Biological and Management Implications of Fire/Pathogen Interactions in the Giant Sequoia Ecosystem; Part I—Fire Scar/Pathogen Studies, Part II—Pathogenicity Studies. Natural Resources Management Department, Cal Poly-San Luis Obispo.

Piirto, D.D. 1980. Environmental Assessment Report and Stand Management Prescription for McKinley Grove. USDA Forest Service, Sierra NF, Kings River RD.

Piirto, D.D. 1978. Guidelines and Action Plan for Management of McKinley Grove. USDA Forest Service, Sierra NF, Kings River RD.

Piirto, D.D. 1977. Final Report to the National Park Service on Structural Failure of Giant Sequoia. U.C. Forest Products Laboratory, Berkeley.

Presentations

Piirto, D.D. and R. Rogers. 1999. An ecological foundation for management of national forest giant sequoia groves. Presented at the 1999 Save-the-Redwoods League annual business meeting at Sequoia and Kings Canyon National Park. September, 1999.

Piirto, D.D., R. Rogers, M. Chislock-Bethke and T. Henry. An ecological foundation for management of national forest giant sequoia groves. A poster presentation at the 1999 National Convention of the Society of American Foresters in Portland, Oregon. The poster display was awarded second place out of 110 submitted posters.

Piirto, D.D. and R. Rogers. 1999. An ecological foundation for management of national forest giant sequoia groves. Presented at the 1999 Giant Sequoia Ecology Cooperative meeting held at Calaveras State Park. May, 1999.

Piirto, D.D. and R. Rogers. 1999. Developing an ecological foundation for management of national forest giant sequoia groves. Paper presented at the April North American Wildlife and Natural Resources conference. Wildlife Mgmt. Institute.

Piirto, D.D. 1997. Converse Basin, its past, present and its future. Paper to USDA Forest Service. Deputy Regional Forester's Meeting held at Hume Lake, CA.

Piirto, D.D. 1997. Special presentation to Dr. Jerry Franklin's University of Washington Ecosystem Management Field Tour class. I presented a talk and led a field tour focused on implementing ecosystem management in Converse Basin.

Piirto, D.D. 1997. Implementing ecosystem management in a State Park setting. Paper presented at California Park Ranger Conference. San Luis Obispo, CA.

Piirto, D.D. 1992. Disease and Insects Associated with Giant Sequoia. A paper presented at the symposium titled Giant Sequoias, Their Place in the Ecosystem and Society on June 23, 1992 in Visalia, CA.

Piirto, D.D. 1991. Giant Sequoia Groves, A Relic to be Preserved or A Resource to be Managed. Testimony and paper submitted at the Congressional Hearings of the Committee on Interior and Insular Affairs on September 4, 1991. Visalia, CA.

Piirto, D.D. and K. Piper. 1991. Biological and Management Implications of Fire/Pathogen Interactions in the Giant Sequoia Ecosystem. A poster presentations at Fourth Biennial Conference of Research in California's National Parks, Davis, CA.

Piirto, D.D. J.R. Parmeter, Jr., F.W. Cobb, Jr., K. Piper, and A. Workinger, 1991. Biological and Management Implications of Fire/Pathogen Interactions in the Giant Sequoia Ecosystem. A poster presentation at the 1991 National Convention of the Society of American Foresters in San Francisco, CA.

Piirto, D.D. J.R. Parmeter, Jr., F.W. Cobb, Jr., K. Piper, and A. Workinger, 1991. Biological and Management Implications of Fire/Pathogen Interactions in the Giant Sequoia Ecosystem—A Progress Report. A paper presented at the Fourth Biennial Conference of Research in California's National Parks. Davis, CA.

Piirto, D.D. 1985. Wood Properties and Unique Characteristics of Giant Sequoia. Presented at the SAF Management and Giant Sequoia shortcourse at Kings River Community College, Reedley, CA. May 24, 1985.

Piirto, D.D. 1976. Factors Associated with Tree Failure of Giant Sequoia. Presented at the First Conference on Scientific Research in National parks. New Orleans, Louisiana. November 1976.

Piirto, D.D. 1976. Factors Associated with Tree Failure of Giant Sequoia. A poster exhibit presented in Mulford Hall Forestry Library Fall 1976.

Piirto, D.D. Structural Failure of Giant Sequoia. Presented at the Third North American Forest Biology Workshop. Colorado State University, Fort Collins, CO.

DOUGLAS D. PIIRTO. PH.D., RPF,
Professor of Forestry and Natural Resources Management.

TRIBUTE TO JOHN CARDINAL O'CONNOR—PERSONAL EXPLANATION

HON. NITA M. LOWEY

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

Thursday, March 16, 2000

Mrs. LOWEY. Mr. Speaker, on February 15, my colleagues honored John Cardinal O'Connor by passing H.R. 3557, a bill to award him the Congressional Gold Medal. Unfortunately, because I had requested and been granted official leave of absence, I was unable to cast my vote in support of this measure. Please let the record show that had I been here I would have voted ''yes'' for H.R. 3557.

As a fellow New Yorker, I have seen firsthand the good work of the Cardinal, in particular, his tireless efforts to improve Catholic-Jewish relations. The negotiations to establish diplomatic relations between the Vatican and Israel were initiated, in large part, by Cardinal O'Connor. The Cardinal's work has truly enhanced human rights and religious tolerance around the globe.

Cardinal O'Connor has also been a leader in the effort to provide care to individuals stricken with AIDS. The Cardinal opened New York State's first AIDS-only unit at St. Clare's Hospital. This effort created a home for those in need of support and care, and supplied Cardinal O'Connor with yet another place to volunteer his time and counsel.

In addition to these remarkable accomplishments, Cardinal O'Connor has devoted his time to promoting racial equality, creating valuable educational opportunities for children, and assisting the poor, sick and disabled. It is clear that Cardinal O'Connor has touched the lives of many Americans and deserves this body's highest honor.

PRAISING GARROD HYDRAULICS

HON. WILLIAM F. GOODLING

OF PENNSYLVANIA

IN THE HOUSE OF REPRESENTATIVES

Thursday, March 16, 2000

Mr. GOODLING. Mr. Speaker, I would like to take this opportunity to extend my congratulations to the employees of Garrod Hydraulics, Inc. for receiving the ISO 9002 (International Organization of Standardization) registration. I am proud to honor the only company registered in the United States for Hydraulic Cylinder Repair, especially when it has been serving York County for over 20 years. With over 35 employees, the company is certainly expanding and has distinguished itself within the industry and the other 22,399 companies with ISO 9002 registration. Garrod Hydraulics has joined the fraternity of Best in the Class, and I salute their hard work and dedication.

HONORING MAGGIE ADELE MCCULLOCH ON HER 1ST BIRTHDAY

HON. JOHN W. OLVER

OF MASSACHUSETTS

IN THE HOUSE OF REPRESENTATIVES

Thursday, March 16, 2000

Mr. OLVER. Mr. Speaker, I rise today to pay tribute to Mark and Molly McCulloch of Holyoke as they celebrate the birthday of their daughter Maggie Adele McCulloch who turns 1 year old today, March 16, 2000.

Mr. Speaker, I commend the McCulloch family for their commitment to Massachusetts and their community.

Over the past decade, my constituent Mr. Mark McCulloch has played a prominent role in the community as Editor of the Holyoke Sun, Westfield Evening News, and now as