TOM JOPSON 2019 FRANCIS H. RAYMOND AWARD NOMINATION

RESPECTIVELY SUBMITTED BY BOB RYNEARSON

CONTENTS:

Nomination Letter

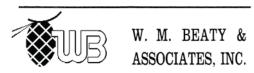
Narrative of Tom Jopson in Support of the Nomination

Letters Supporting the Nomination

Cal-Forest Nurseries Reforesting the West - Siskiyou Daily News

F O R E S T L A N D M A N A G E M E N T

May 29, 2019



845 BUTTE ST. / P.O. BOX 990898 REDDING, CALIFORNIA 96099-0898 530-243-2783 / FAX 530-243-2900 www.wmbeaty.com

Attn: FHR Nomination Review Committee BOARD OF FORESTRY & FIRE PROTECTION PO Box 944246 Sacramento CA 94244-2460

Re: Nomination of Tom Jopson for 2019 Francis H. Raymond Award

Dear members of the FHR Nomination Review Committee:

In appreciation for his outstanding contributions to California forestry it is my honor to nominate Tom Jopson for the 2019 Francis H. Raymond Award. Tom epitomizes the ethic, expertise, care and passion for California forestry shown by Francis Raymond and previous FR Award winners. Enclosed is a narrative detailing Tom Jopson's background and his contributions in the following endeavors:

- 1. Founder and President, Cal Forest Nursery (Growpro, Inc.), 1977-present and Siskiyou Seed Co. 2007 to present: with his "customer first" attitude and passion for our reforestation success, Tom goes well beyond "business as usual" to cost effectively grow a few hundred million healthy, vigorous native tree seedlings that California forestland owners and managers have planted to successfully reforest hundreds of thousands of acres. Tom's willingness and ability to maximize the number of seedlings that can be produced from a limited amount of seed and to expand his nursery's infrastructure after large fire years, has greatly facilitated our, and other forestland managers, ability to reforest after large wildfires. Mark Gray sums it up well in his attached support letter: "Tom's contribution can be seen everywhere in Ca. forests. When you pass a burn and see a vigorously growing young forest it is very likely you are looking at trees grown by Tom".
- 2. Chair, California Reforestation Legacy Committee, Forest Vegetation Management Conference. California Reforestation Manual. 2014 to present: Tom initiated this effort, volunteering much time and money, while also encouraging myself and several other reforestation experts to participate.
- 3. Lebanon Reforestation 2010 to present: Tom has donated thousands of dollars and weeks of his time every year helping with the startup of many small nurseries in villages and towns throughout Lebanon and continued follow-up visits. He generously shares with nursery and reforestation managers his expertise developed over the past 40 years in California's similar Mediterranean climate. Tom has brought me along on some of his trips to Lebanon (to provide advice on reforestation techniques) and I have experienced first-hand not only his dedication and excellent results, but the trust and life-long friendships he has developed with the hard working, friendly and hospitable people in Lebanon's diverse communities.

Board of Forestry & Fire Protection letter Nomination of Tom Jopson for 2019 Francis H. Raymond Award May 29, 2019 – Page 2

- 4. Turkey High Elevation Afforestation: 2015 to present. Again, Tom has voluntarily shared California's successful nursery and reforestation practices with nursery managers and reforestation project managers in Turkey.
- 5. Reforestation Research: Tom volunteers his time and donates his resources for trials and applied research that has benefited many of us forest landowners and/or managers in California.
- 6. Community Service: Siskiyou Resource Conservation District, Board Member, 2016 to present and Scott Valley Groundwater Advisory Committee to Siskiyou County, Member, 2011 to present.

In addition to the narrative included in the nomination packet are more than two dozen letters/emails from a diverse group of organizations, companies and individuals supporting Tom's nomination, including those responsible for much of the successful reforestation in California (and Lebanon and Turkey). Also attached is an article titled Cal-Forest Nurseries Reforesting the West that describes Tom's nursery in the Scott Valley in Siskiyou County. The following is a link to a video produced by UC Natural Resources with a brief interview of Tom showing the dedication he brings as a critical part in California's reforestation: https://www.cafamilyforest.org/reforestation.html

Presenting Tom Jopson with the Francis H. Raymond Award would send a message that passionate and selfless dedication to the growing, planting and nurturing of native tree seedlings is a key factor in meeting California's long-term sustainable forest management goals. So I, along with many others, heartily encourage you to select Tom Jopson for this award and we thank you for your consideration of this nomination.

Sincerely,

W. M. BEATY & ASSOCIATES, INC.

Bob Rynearson, RPF #1921

Felt & Ry

Manager, Land Department

BR: klh

NARRATIVE of TOM JOPSON

Submitted by Bob Rynearson, RPF#1921, W. M. Beaty & Associates, Inc.

Tom Jopson sometimes calls himself a "serial entrepreneur": he likes to transform his passions and creativity into new businesses and projects. Reforestation is his biggest passion, as reflected by a long list of successful and innovative accomplishments. Sharing the reforestation knowledge he's gained over the past four decades including with people in several countries near the Mediterranean, who benefit from his California experience in a similar "Mediterranean" climate.

CalForest Nurseries (Growpro, Inc.), Founder and President [1977 to present]

rom scratch, Tom alone created Cal- orest Nurseries to grow nursery seedlings for reforestation back in 1978 in Covelo (Mendocino County). In those days, bare-root seedlings were the predominant type of conifer planting stock in California but his searches led him to believe that using container stock showed great promise – as it has significantly proven to be. Insufficient seedlings were available for small forest landowners in the North Coast and he originally sought to fill that need at an affordable cost. His educational training at U. C. Davis (B.S., Agricultural Economics, 1974; M.S., Environmental Horticulture, 1984) provided him with many of the skills needed, but growing up in Trinity County with a family business also offered him the perspective to survive in a rural setting and work well with customers.

In the early years, Tom provided the full range of reforestation services: cone collection, seed cleaning and storage, landowner contact, cost-share grant applications, forester coordination, site preparation, greenhouse construction, nursery production, and tree planting. That diverse experience has served him well after later being able to focus just on seedling production, as he understands how the various pieces of the reforestation puzzle need to successfully come together. It also became essential to have almost all of the seedlings pre-ordered and under contract to ensure no seeds or seedlings were wasted.

Needing room to expand the nursery in a better location, Cal- orest moved its entire operation in 1988 inland to Etna (Siskiyou County), near the I-5 corridor. Seedling volume at that time was 1.1 million container trees annually, barely enough size to support management assistance for Tom. Customers expanded beyond small forest landowners to timber companies, US S, BLM, and others, and beyond California to many western states. Reforestation needs also expanded beyond post-timber harvest to post-wildfire. By 2005, Cal- orest Nurseries packed approximately 11 million seedlings, with 25 full-time and 15 seasonal employees. Production has fluctuated annually, usually ranging from 15 to 20 million conifer seedlings in the past decade. (Slizewski 2011).

In 2019, the nursery is under contract to produce 24 million seedlings, with 24 full-time and 38 seasonal employees. Immense wildfires in California and Oregon last year created an urgent, expanded demand for conifer seedlings by private and public customers. Tom could not say 'no' to any requests and has built a new 1.5 acre (60,000 sq. ft.) greenhouse to accommodate that critical need at his Fort Jones nursery location. Since its start in 1978, Cal- orest Nurseries has produced over 250 million conifer seedlings for reforestation, primarily for California.

In 2001, Tom became President, Chief Executive Officer, and Chief Financial Officer of his new company rowpro, Inc., a California Corporation. Cal-Forest Nurseries is now one business under this parent company, along with Mountain Crest Gardens (a succulent nursery) and Siskiyou Seed.





Our Douglas fir (DF) seedlings growing at Tom's nursery in 2001 (left) for planting the Storrie Fire in 2002. Ten years later DF with pine and other species from Tom's nursery, growing a new forest on the Storrie Fire in 2012 (right). Tom's installation of "black out" equipment & technology at CalForest Nurseries' greenhouses in the late 1990's led to more vigorous DF seedlings and higher survival rates in interior California's hot, dry summer environment.

Chair, California Reforestation Legacy Committee, Forest Vegetation Management Conference. *California Reforestation Manual*. [2014 to present]

Tom was instrumental in initiating the drafting of a new California conifer reforestation practices manual to document what California's most experienced reforestation experts have learned over the past several decades since the last book was written in 1971 (Reforestation Practices for Conifers in California by California Div. of orestry and US orest Service). Encouraging the orest Vegetation Management Conference to sponsor this effort, Tom became chair of its California Reforestation Legacy Committee in 2015 (FVMC 2015) and proceeded to pull together a dozen or so known reforestation experts from the private and public sector in the state to formulate an outline of what the new handbook should contain. He has donated countless hours of his time and a significant amount of his own money (in addition to state and federal grants and other donations) in this effort. Tom not only encouraged and coordinated many experts to author and/or peer review the numerous chapters in this handbook, he also authored the chapter on what a forester should know about growing seedlings in the nursery (Jopson and Gray 2018). UCANR will publish this new manual in 2019 under direction of the technical editor, UC Berkeley's Dr. Bill Stewart.

Siskiyou Seed [2007 to present]

Tom was drawn back into the conifer seed business once again after many of his clients requested his services due to a shortage of good options. Since 2007, Siskiyou Seed has offered seed cleaning and storage for multiple conifer species for private and public customers. Valuable technical assistance was initially provided by experienced seed staff at CalFire's L.A. Moran Reforestation Center in Davis. A total of 40,000 pounds of seed for 18 different species are currently in storage at the Fort Jones facility. Computerized records offer useful retrieval data on each seed lot stored (Slizewski 2011). Having quality seed for diverse seed zones is essential for successful reforestation in California.

Cal-Forest Nursery Wood Gasification System [2005 to present]

Energy needs and costs to heat the multiple greenhouses at Calorest's nursery facility in Etna triggered an interest by Tom to develop heat from biomass. Wood waste in the form of logging residue is available locally in sufficient quantities to meet these needs. After exploring technical options in 2005, Tom and two colleagues decided on a wood gasification system. A grant was eventually received from the California Energy Commission (CEC) to demonstrate the technical and economic feasibility of this method for automatically producing heat and electricity for his commercial greenhouses (CEC 2010). This innovative effort adapted the gasifier to include fuel drying and heating, gas cooling and filtering, and full automation of all functions. They concluded that heating production is both possible and very economical, but the electrical production economics were not as compelling (Jopson et al. 2012). This small-scale pilot project was noted as operational in several articles on biomass in the state (Mayhead and Tittman 2012; Tittman 2015). Tom continues to use the wood gasifier to heat several of his main greenhouses each winter to help save on heating costs and keep his seedling prices affordable to landowners. Researchers from UC, OSU, EPA and elsewhere have also come to collect biochar, a byproduct of the system, for research on soil carbon storage.



Wood gasification system heats greenhouses at CalForest Nurseries utilizing wood fuel chips produced as a byproduct of thinning operations to improve forest health.

Lebanon Reforestation [2010 to present]

In May 2010, the U. S. Forest Service brought about 12 people over from Lebanon to visit tree nurseries throughout the western region, including Cal- orest Nurseries, as part of reforestation training funded by USAID. With this introduction, Tom was invited by USAID to visit Lebanon that July to provide workshops about nursery production techniques at several sites. He was so impressed with the Lebanese interest and need to reforest vast areas with native *Cedrus libani* (Cedar of Lebanon), their national symbol, and other conifer species that he has donated his time and costs to revisit the country several times a year over the next eight years as a volunteer advisor to share California nursery and reforestation practices.





2014: Tom helping sow seeds into styroblock containers at AFDC's Ramlieh nursery (left). Although Tom's California nursery has state of the art computerized equipment that can sow thousands of seed per minute, the principles of successfully sowing seed and growing seedlings in Lebanon's small village nurseries is the same. 2012: Tom inspecting Cedrus libani "Cedar of Lebanon" seedling with reforestation project manager at "Cedars of God" nursery in Bcharre, Lebanon (right).

Working directly with the nonprofit Association for orest Development and Conservation (AFDC), Tom has helped several organizations and communities to facilitate their establishing and operating tree seedling nurseries and reforestation projects in Lebanon. His contributions have also included his time and funds to bring A DC nursery managers and others to California to visit his nursery and do field tours with California reforestation foresters about site preparation and outplanting techniques. For nursery practices, he helped the Lebanese reduce irrigation needs, produce an operation manual, and develop consistent, high quality seedlings. or planting practices, Tom donated money to start several trials in many areas of Lebanon, brought me to Lebanon three times to provide my > 30 years of reforestation expertise in California to advise A DC and demonstrate site preparation and planting techniques, and encouraged other consultants to participate in these trails.



A DC says it is thankful for "Tom's big efforts in promoting reforestation in Lebanon and changing the mentality of the key stakeholders working in this field." The Cooperative of Native Tree **Producers** Lebanon in (CNTPL) remarked that "Tom Jopson's green fingers left their signs in the Lebanese forests...We're now producing 600,000 seedlings per year, raising the survival rate of the trees after planting from 20% to more than 90%. Million thanks to Tom on behalf of CNTPL and on behalf of our children and the generations to come for helping us reforest our country."

2014: Tom inspecting seedling root growth two years after test planting (close to the Syrian border & east of the Bekka Valley) near Rachaya, Lebanon with AFDC's Nature & Conservation Program Coordinator, Hisham Salman, (middle) and Rachaya community representatives (left & right).

Turkey High Elevation Afforestation [2015 to present]

In 2015, Tom received an email out of the blue from the Turkish Ski Association asking if his California nursery could grow some tree seedlings for a ski area in eastern Turkey to improve snow conditions and provide shelter for skiers. This odd request piqued his interest, needless to say. To make a long story shorter, he ended up working with the Turkish General Directorate of Forestry ("O M") to demonstrate reforestation techniques that might lead to more success with afforestation at high elevations in Turkey, based on California's successful nursery and reforestation practices. Tom also worked hard to involve A DC from Lebanon in the project to share experiences between Lebanon and Turkey, and invited a group of government nursery managers from Turkey to be trained at A DC's training facility in Ramlieh Lebanon where a small nursery is located, for a week-long workshop. Tom also invited two agency foresters to California to see Calorest's operation and to visit reforestation sites in the region.



As in Lebanon, Tom set up several planting trials to help evaluate the best practices: two species, different vegetation control treatments, at two different high elevation (~2,500 meters) mountain sites in eastern Turkey (at Erzurum and Kayseri) near ski areas. He donated his time but the Turkish ores try agency graciously provided most travel and accommodations. A final visit to evaluate the trials was made in October 2018, followed by a presentation before forestry officials at their headquarters in Ankara. The final report was recently completed, including recommendations for next steps (Jopson et al. 2019).

Tom (right) & AFDC's Farouk Salman (middle) w/ Turkish General Directorate of Forestry staff (left) evaluating seedling survival & root growth at Kayseri

Forestry Research and Management [1980 to present]

Tom continues to volunteer his time and donate his resources for trials and applied research that have benefited forest landowners and managers with the following forest research and management organizations:

- Sierra-Cascade Intensive orest Management Research Cooperative, Member of Working roup "Seed to Establishment", 1999 to present.
- California Forest Vegetation Management Conference, member and sponsor, 1988-present.
- Western orest Nursery Conservation Association, member, 1980-present.
- True Fir Cooperative, Member (1980s-1990s; group now inactive).
- North Sierra Tree Improvement Association, participant.

Community Service

Locally, Tom serves on the board of the Siskiyou Resource Conservation District (2016 to present) to help ensure that landowners and managers in the Scott River watershed have access to technical and financial assistance for conservation practices. As a groundwater user for his nursery facilities, he is a member of the Scott Valley roundwater Advisory Committee to Siskiyou County (2011 to present) to promote sustainable water use practices.

Publications by, or about, Tom Jopson (In chronological order, most recent first):

Jopson, Thomas, Salmon, Farouk, and Hisham Salman. 2019. "Evaluation of Trials to Test New Methods of Vegetation Control and Planting for Afforestation at High Elevation on Palandoken Mountain-Erzurum and Erciyes Mountain-Kayseri, October 2018". inal Report. Prepared for Turkish General Directorate of orestry (OGM). Prepared by the Association for Forest Development and Conservation (AFDC), Jdiedeh, Lebanon. 21 p.

Jopson, Thomas and Mark Gray. 2018. *Chapter 6: Seedlings*, in: *California Reforestation Manual*. Final Draft. To be published by UCANR. 33p.

UC Agriculture and Natural Resources (UCANR). 2016. *Developing a Reforestation Plan*. Video. https://www.cafamilyforest.org/reforestation.html Berkeley.

"Every need in the forest is the same, whether it's five thousand acres or five acres, it's still a hole in the forest that somebody wants to fill...when [landowners] are planting a seedling, they're making a commitment really beyond their lifetime in most cases." ~ Tom Jopson

Tittman, Peter. 2015. The wood in the forest: Why California needs to examine the role of biomass in climate policy. *California Agriculture* 69(3): 133-137.

California orest Vegetation Management Conference. 2015. VMC Resolution 2015-1: Reforestation Practices Manual Update. Redding, CA. 1 p.

Association for orest Development and Conservation (A DC). 2014. Demonstrating Highly Successful, Low Cost Reforestation in Lebanon: Results from 2013 and 2014 Trials. Jdeidah, Lebanon. 16 p.

Jopson, Thomas, Miles, Thomas, and Doug Williams. 2012. "Developing and Operating a Wood Gasification System for Commercial Greenhouses in Northern California", final report by Growpro, Inc., to California Energy Commission – Public Interest Energy Research (PIER) Program. CEC-PIR-07-001. March 2012.

Mayhead, G. J. an P. Tittman. 2012. Uncertain future for California's biomass power plants. *California Agriculture* 66(1):6-6.

Slizewski, M. 2011. *Cal-Forest Nurseries: Reforesting the West.* True North / Siskiyou Daily News. Winter 2011. Yreka, CA. 6 p.

California Energy Commission (CEC). 2010. "Growpro Inc., d.b.a. Cal-Forest: The Project will Develop and Operate a Wood Gasification System in a Commercial Environment in Northern California." act Sheet by the Public Interest Energy Research (PIER) Program. Sacramento. 1 p.

Jopson, Thomas. 1984. -----. M.S. Thesis, Environmental Horticulture, U.C. Davis.

LETTERS (& EMAILS) SUPPORTING the NOMINATION of TOM JOPSON for the 2019 FRANCIS H. RAYMOND AWARD

- 1. Mark Gray, Coast Cascade Reforestation Manager, Sierra Pacific Industries
- 2. Forest Landowners of California, Claire McAdams, Ph.D., President
- 3. California Forestry Association, Richard Gordon, President
- 4. Ray Haupt, Siskiyou County Supervisor District 5 & Calif. RPF
- 5. Association Forest Development & Conservation, Lebanon, Hisham Salman, Nature & Conservation Program Director
- 6. Cooperative of Native Tree Producers of Lebanon, Khaleed Sleem, Vice President, Production & Sales Manager
- 7. Garo Haroutunian, Manager of *Safeguarding and Restoring Lebanon's Woodland Resources (SRLWR) Project* (2009 -2014) (via email)
- 8. Republic of Turkey, Ministry of Agriculture & Forestry, General Directorate of Forestry, Ibrahim Yuzer
- 9. Mark Pustejovsky, Northern Sierra Area Reforestation Manager, Sierra Pacific Industries
- Craig Ostergaard, South Sierra Reforestation Manager, Sierra Pacific Industries
- 11. Wendy L. Johnson, Vestra Resources, Inc., Vice President, RPF and small private timber producer
- 12. Charlie Brown, retired Vice President Northern Operations, Fruit Growers Supply Co.
- 13. Eliazar Padilla, President, Forest Protection LLC
- 14. Red River Forests LLC, Anthony Fouracre, Board Chair
- 15. Julia Gilmore, Chair, Family Council of Red River Forests LLC (email)
- 16. Mari Okie-Fouracre, Former Board member of Red River Forests LLC (email)
- 17. Collins Pine Company, Eric O'Kelley, RPF
- 18. LandVest, Arne Hultgren, Special Projects Forester
- 19. Jefferson Resource Company, Danielle Lindler, CEO (also RPF & PCA)
- 20. Jeff Webster, RPF, Forestry Consulting
- 21. Lennart Lindstrand, Jr., California RPF, non-industrial forestland owner and retired W. M. Beaty & Associates, Inc. Lands Manager
- 22. William Stewart, Forestry Specialist, UC Berkeley College of Natural Resources, Dept. of Environmental Science, Policy & Management
- 23. Jianwei Zhang, Research Forester, USDA Forest Service Pacific Southwest Research Station, Redding CA
- 24. Keli McElroy, Vegetation Program Manager, USDA Forest Service Shasta-Trinity National Forest (via email)
- 25. North Sierra Tree Improvement Association, Scott Carnegie, Chairman
- 26. California Forest Pest Council, Bob Rynearson, Chair



Sierra Pacific Industries Forestry Division | P.O. Box 496014 | Redding, CA 96049-6014 | (530)378-8000

Re: Nomination of Tom Jopson for Francis H. Raymond Award

Dear Members of the F.H. Raymond Nomination Committee,

Tom founded Cal forest nursery on a shoestring and built it into THE nursery for conifer seedlings in California. Cal Forest provides more than 90% of the seedlings that Sierra Pacific plants in reforestation of burns and after harvest. Many of the large burns that are on our company lands have 100% Cal Forest seedlings planted on them. These burns include the Moon, Bagley, Day and many smaller burns in the area I manage. Cal Forest will grow the 12 million seedlings required to reforest 2018's Carr, Delta and Hirz burns.

Tom is a unique individual that sees a need and then finds a way fill that need in a straight forward, no nonsense way. Making money never seems to be his motivation; it is finding solutions that seem to be the motivation behind his work. This is a very unique quality! His many business successes are a testimony to his determination to provide the best quality product or service at a reasonable price. He is always searching for ways to improve his infrastructure, growing methods and efficiency at the nursery and that has resulted in the production of the best quality seedlings at the lowest possible cost. When the economy crashed in 2008, Tom saw the difficulties the industry was experiencing and voluntarily took a price cut on his seedlings. Despite his incredible success Tom remains humble and gives all of the credit to those that have helped him along the journey.

Finally and most importantly for this award, Tom is a man that is dedicated to giving back to the forest and community. He donates his time and capital to a vast array of projects that range from helping in Lebanese and Turkish reforestation efforts to spearheading the re-write of the Ca. reforestation manual. He also donates time and money to the Sierra Cascade Intensive Forest Management Research Cooperative. His most recent research project will be examining Douglas fir seedling lift timing as it relates to warming temperatures and subsequent seedling performance after planting. Tom has grown and donated most of the seedlings for a myriad of trials that the COOP has sponsored as well as the seedlings for the North Sierra Tree Improvement Association seed orchard in Malin. These are a few examples of more recent work, but Tom has been actively seeking a better way to grow trees in Ca. since the early 80's.

His community involvement includes being on the Siskiyou RCD board and the Scott Valley Groundwater board. He also plays tuba in the COS Community Concert band. His greatest gift to the community however is providing so many good jobs in an area that traditionally experiences high unemployment rates.

Tom's contribution can be seen everywhere in Ca. forests. When you pass a burn and see a vigorously growing young forest it is very likely you are looking at trees grown by Tom.

Sincerely,

Mark Gray

Coast Cascade Reforestation Manager

Sierra Pacific Industries



950 Glenn Drive, Suite 150 Folsom CA 95630

Telephone: 877.326.3778

info@forestlandowners.org www.forestlandowners.org

May 30, 2019

Attn: FHR Nomination Review Committee Board of Forestry & Fire Protection P.O. Box 944246 Sacramento, CA 94244-2460

Re: Nomination of Tom Jopson for the 2019 Francis H. Raymond Award

Dear Committee Members:

Tom Jopson is one of those people who makes you grateful that they are alive. In my 3 decades of travels to forestry events across California, Tom turns up like clockwork to help the rest of us by providing the seeds and knowledge to do our best stewardship, and he has been doing that for a long, long, time-since 1977. I, as manager of McAdams Lands LP, have recently been given the honor of being named California Tree Farmer of the Year for 2019, and I believe that this would not have occurred without the quiet consistent work of Tom Jopson to aid our stewardship and those of all California Tree Farmers.

Reforestation demands a source of both native seed and seedlings, and Tom has long provided both through his Cal Forest Nursery, and his Siskiyou Seed Company. His products have been planted across the state, in literally thousands upon thousands of acres. He has provided these affordably and given freely of his expertise to buyers, with enthusiasm and encouragement.

One might call Tom "Mr. Reforestation": the *California Reforestation Manual* exists because he Chaired the California Reforestation Legacy Committee, of the Forest Vegetation Management Conference. He has been twisting arms (gently) to get other experts to contribute since 2014. Across the state and for many years, he has aided reforestation research, helping with trials and consulting on applied research.

In his own community, he has long served to insure both water issues and forestry issues are well handled. Since 2011 he has been a member of the Scott Valley Groundwater Advisory Committee to Siskiyou County; and he has been a board member of the Siskyiou Resource Conservation District since 2016. Tom's businesses provide many good jobs in an area that struggles with high unemployment.

His caring even extends internationally:

The sharing of his expertise extends to his aid with the Turkey High Elevation Afforestation, begun in 2015 and continuing today. He gives voluntarily of his knowledge of nursery and planting practices to increase the success of this project.

Since 2010, he has contributed massive time and money to Lebanon's ongoing community nurseries and its reforestation projects. Because California and Lebanon share a similar Mediterranean climate, his knowledge of our nursery and reforestation practices is directly

applicable to those of Lebanon. Tom has aided world forestry and even world peace through his long and warm relationships with Lebanese community members.

For all these reasons, I, on behalf of the Forest Landowners of California highly recommend that you award the Francis H. Raymond Award to Tom Jopson. The native seeds and seedlings, and the knowledge of how best to utilize them, that he bears and so willingly shares, will be deeply needed as California rebuilds its forests after wildfire. Honoring him would send an encouraging message to Californians at this time when the public hopes to hear that solutions to our current wildfire crisis do exist, and needs to learn that one must take the 'long view' in responding. Tom Jopson's life work does just that; all California is fortunate that he is spending his life as he is, reforesting California.

Sincerely,

Claire McAdams, Ph.D. and President,

Claire Mcadams

Forest Landowners of California





May 22, 2019

Dear Members of the Francis H. Raymond Award Nomination Committee:

California is in a period where our treasured forest resources are under threats from climate change and unprecedented wildfire. It has never been more critical to have the capacity and capability to respond to these challenges. A key aspect of that response is our ability to have diverse grow and healthy growing stock to restore and reforest our lands. The California Forestry Association would like to support the nomination of Tom Jopson for the 2018 Francis H. Raymond Award in recognition of his leadership in developing innovative solutions to this challenge.

Tom began his business in 1977 in Covelo. It was modest and humble, to say the least. That business will produce 24 million seedlings in 2019. That production is critical to landowners' efforts in this State. But it is not just this supply that is critical, it is the profound increase in quality as well. Tom was an early proponent in the shift from bare-root stock to containerized stock. That change has radically increased survivability and growth in replanted areas. That change in stock has led to the reconsidering of our forest practice rules regarding re-planting. When Tom began in this business, survival rates of 50-60 % were not uncommon. These rates now exceed 90 %, and this has led to better reforestation at a reduced cost to landowners.

Tom has been a leader in forest vegetation management, and he was a driving force in bringing professionals together to develop a new sourcebook for reforestation for California. Tom has never hesitated to share his knowledge with anyone who is interested.

Sincerely, Richard Gordon

President

California Forestry Association

COUNTY OF SISKIYOU

Siskiyou County Supervisor District 5

P.O. Box 750 - 1312 Fairlane Rd Yreka, California 96097 www.rhaupt@co.siskiyou.ca.us Cell (530) 925-0444 FAX (530) 842-8013

May 27, 2019

Mr. Robert G. Rynearson W.M. Beaty and Associates, Inc. P.O. Box 990898 Redding CA 96099-0898

Subject: Support Letter for Tom Jopson nomination of the Francis H. Raymond Award

To: Francis Raymond Award Committee

As the District 5 elected representative on the Board of Supervisors of Siskiyou County; I am pleased to submit a statement in support of nominee Tom Jopson for the Francis H. Raymond Award. Tom is well known in my District as an innovator and tireless entrepreneur. He serves on multiple committees using his talent and intellect to guarantee the success of his community. His dedication to Reforestation is but one example of his dedication to my constituents, my county and to my Forestry profession and why he must be nominated for this prestigious award.

Tom has been a local leader in reforestation for decades. As other larger nurseries have closed that left a void in the industry, Tom has built-up his business to meet that shortfall and the demands of the Forest Landowners. He has met every new challenge with success in a field where the science of growing seedlings across a geographic region with great ecological complexity demands highly specialized seedlings designed for individualized planting survival. Most nurseries have not kept pace but CalForest Nurseries has prevailed under Tom's Leadership.

In recent history our County has lost over a million acres of Forest to Catastrophic Wildfire. Siskiyou County has a few base industries that drive our economy and frankly they pay the bills for the public services that all our citizens enjoy. In a county where \$1 invested in Forestry expands to \$5 in the local economy, reforestation is critical to the future of our economic vitality. Deforestation is one of the largest threats to our rural way of life. Without Tom's dedication to reforestation our county will suffer long term economic viability. Tom has rapidly expanded his business to supply the seedlings for this unprecedented reforestation demand with a dedication and commitment to forestry that I have not experienced in my 40-year career. When Tom described his task ahead for Fire Recovery last fall, I was

COUNTY OF SISKIYOU

Siskiyou County Supervisor District 5

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impressed by his optimism to embrace industries demand where most would shrink from the challenge due to the personal business risk of such a rapid expansion. 6 months later I am more impressed with his success in delivering on that challenge. From my profession, I want to personally Thank You! Tom you are an instrumental figure in a historic reforestation effort that will be appreciated for generations.

Tom is a standout as a community leader in Siskiyou County and I am proud to give him my support for this recognition. I urge you to recognize Tom's dedication to Forestry and his continued commitment to the citizens of our county by awarding him the Francis Raymond Award.

Sincerely;

Ray A. Haupt

Ray A. Haupt Siskiyou County Supervisor District 5 CA RPF #2938



الله 1st floor - Building 26 طابق ۱ - بنایة ۲۱ شارع الحكمة ٧ - الجديدة - لبنان خليوي: ۲۵ ۲۲ ع٤٤ ۷۰ ۹٦۱ +۹٦۱

Sagesse St. 7 - Jdeideh - Lebanon Tel/Fax: +961 1 89 84 75 - 6 Mobile: +961 70 44 42 35 wael@afdc.org.lb - www.afdc.org.lb

Dear Mr. Bob Rynearson, I am writing this letter to express my support the nomination of Mr. Tom Jopson for the 2019 Francis H. Raymond Award.

I had the pleasure to meet Mr. Jopson for the first time in 2011 during a study tour organized by the US Forest Service. At his nurseries in California, Mr. Jopson welcomed the Lebanese participants as he explained his experience in seedling production and reforestation. What struck me the most was Mr. Jopson's passion for his work and his genuine interest in the Lebanese case-study, an interest that stems from his scientific background and inquisitive nature. Meeting Tom at his workplace and later having dinner at his own home and backyard was probably the highlight of the study tour. Thanks to his lively character, Tom managed to establish an immediate connection with the Lebanese participants.

Tom soon had the chance to visit Lebanon as a consultant on a mission to increase the capacities of local nursery managers in modern seedling production techniques. He soon realized that a one-time mission to Lebanon will not be enough if he was to push for a serious change in the country's forestry sector. Therefore, he took it upon himself to support Lebanese actors, especially the "Association for Forests." Development and Conservation (AFDC)", to acquire the knowhow to grow high-quality forest seedlings that have the utmost probability of survival in Lebanon's quasi semi-arid climate.

Tom, the AFDC team, my brother Farouk Salman and I, developed in the process a strong friendship that was based on our mutual love for forests, ecosystem rehabilitation, the science behind successes and failures of landscape rehabilitation and of course good food.

What I appreciated the most about Tom's character was his relentless drive to understand what could be done to raise the survival of planted forests in Lebanon. He did not leave a stone unturned and shared his ideas and suggestions that stem from a long experience of reforestation in his native California. The AFDC acquired a lot of Tom's ways and nowadays implements his exacting standards throughout its interventions and research projects.

The AFDC will be forever indebted for the constant support Tom provided throughout the years and will always consider him as one of its biggest overseas supporter and ally.

A million thanks to my friend Tom; may you forever be the secret ally of Lebanon's present and yet to

be forests!

Sincerely yours

Hisham Salman

Association

Nature and Conservation Program Coordinator



Dear Mr. Bob Rynearson, I support the nomination of Tom Jopson for the 2019 Francis H. Raymond Award

I met Tom Jobson the first time in his nursery in California during a study tour with the US forest services to learn from the American experience in nursery production and reforestation, after that Tom visited The Lebanon as a consultant with the USFS to develop native forest tree production in the Lebanese nurseries, During his visit Tom's generosity to help didn't end at the end of the workshop that he conducted to a group of nursery managers (who later on founded the CNTPL, Cooperative of Native Tree Producers in Lebanon", his help continued nonstop until now, during these years Tom visited Lebanon almost every year, I learned that he always funded these visits from his pocket, during each visit he paid a visit to most of the nurseries members of the CNTPL to check if they were following the right production protocols, to check seedlings quality, and open a discussion about reforestation activities that was happening in our sites. Tom never stopped helping the members of the CNTPL with information and assistance, in providing equipment for soil testing, and shipping material like fertilizers that are not available in our country.

Tom Jopson's green fingers left their signs in the Lebanese forests, without his help we were not able to achieve this leap frog in tree production, from producing low quality trees in polybags to producing high quality seedlings that are able to survive Lebanon's harsh field conditions. CNTPL is now able to produce more than 600,000 seedlings per year, raising the survival rate of trees after planting from 20% to more than 90%.

Million thanks to Tom on behalf of CNTPL and on behalf of our children and the generations to come for helping us reforest our country.

Khaled Sleem, Vice President Production and Sales manager



Bob Rynearson

Subject: Support for the Nomination of Tom Jopson for California Forestry Award

From: Garo Haroutunian

Sent: Sunday, May 26, 2019 2:52 PM

To: Bob Rynearson

Cc: Hisham Salman; Sari Sommarstrom

Subject: RE: Support for the Nomination of Tom Jopson for California Forestry Award

Dear Bob,

I managed Lebanon's "Safeguarding and Restoring Lebanon's Woodland Resources (SRLWR) Project" from 2009 till end 2014. The project was jointly implemented by the Ministry of Environment of Lebanon (MoE) and the United Nations Development Programme (UNDP) and funded by the Global Environment Facility GEF.

The objective of the project was "to remove the institutional, economic, technical barriers to Sustainable Land Management in order to enable the National Reforestation Plan to meet its targets".

In 2010 the MoE received an invitation from the US Forest Service (USFS) to nominate 2 representatives to participate in a reforestation study tour in the United States. I was one of the nominees.

I first met Mr. Tom Jopson when our team visited his nursery (CAL Forest Nursery) in California. It was the most enriching experience for us all in the field of the production of forest tree seedlings. The differences between our traditional methods and the ones followed by Tom were simply amazing.

Soon after our return to Beirut, Tom continued following up with us in order to make sure we are applying his recommendations accurately. Additionally, he kept on visiting us regularly over several years, sometimes based on our invitations but most of the times through his personal initiatives and at his own expenses, visiting the nurseries across lebanon from its mountains, till the Cedars and the Bekaa valley, to check if his techniques were being implemented properly and the desired quality of seedlings was reached.

On our request, Tom shared his expertise and knowledge also with the managers of the nurseries of the Lebanese Ministry of Agriculture, who stated that this training was the most beneficial they had ever attended.

Finally, Tom invited several Lebanese experts to California (once again, at his own expenses), trained them further for weeks, hosted them in his own house and considered them family. Upon their return, our colleagues couldn't imagine how they could express their gratitude towards him.

All this led to:

1) Shifting from the traditional methods of seedling production by almost all Lebanese tree seedling production nurseries to modern techniques;

- 2) Adoption of the concept of transplantation at around 8 months of seedling age (rather than the traditionally requested 2 years old seedlings) by both the ministries of Environment and Agriculture;
- 3) Adoption of the concept of transplantation at the right time (when soil humidity reaches 20% moisture) rather than fixing the period of November to February for all years;
- 4) Production of seedlings that can withstand drought and do not need irrigation once transplanted;
- 5) Remarkable decrease of reforestation costs in lebanon from around 7,000 USD to around 2,500 USD and sometimes even less;
- 6) Restoration of large areas of damaged forests with the new seedlings produced at lower costs;
- 7) Discarding irrigation almost completely in reforestation practices;

If we can justifiably state today that Lebanon has accomplished a major step forward in reforestation in general and tree seedlings production in specific, we all agree that we owe this achievement mainly to Tom and his dedication, wonderful character and his undeniable readiness to share his knowledge with everyone in need of such expertise.

We miss him and wish him the best of luck, good health, success and prosperity and look very much forward to seeing him again one day soon in Lebanon.

Best,

Garo Haroutunian

Sent from Mail for Windows 10



Republic of Turkey Ministry of Agriculture and Forestry General Directorate of Forestry

May 27, 2019

Re: Nomination of Tom Jopson for Francis H.Raymond Award.

Dear members of the FHR Nomination Review Committee,

I am pleased to write this letter to express our support as the General Directorate of Forestry (OGM) in Turkey for the nomination of Mr. Tom JOPSON to the 2019 Francis H. Raymond Award.

I would like to express my great pleasure to learn for nominating Tom Jopson to the Francis H. Raymond Award that is presented by the California State Board of Forestry & Fire Protection every year. In this sense, we would like to support him because of helping us for developing afforestation activities in Turkey.

We, as the General Directorate of Forestry, are carrying out intensive afforestation works for expanding and developing forest lands in Turkey in order to ensure our children and next generations to live in a cleaner and greener environment. We work together with many kinds of different groups that include especially children and young people on planting activities in order to increase their environmental awareness, and also we plant thousands of trees every year on the large areas in whole country. In this context, we also try to improve afforestation, reforestation and rehabilitation technics in Turkey. For this purpose, we cooperate with government agencies, some foreign experts and NGOs for the implementation of these activities.

Mr. JOPSON is one of the important experts that we cooperated with him during 2017 and 2018. We implemented a project which is called as "Trials to Test New Methods of Vegetation Control and Planting for Afforestation at High Elevation on Palandoken Mountain-Erzurum and Ercives Mountain-Kayseri" in collaboration with him and Association for Forest Development and Conservation (AFDC) from Lebanon. The project aims to increase forest cover in ski areas on the higher elevations above 2.500 m. of mountains and it is being performed in two phases:

- 1) Design, treatment, and planting of plots in 2017,
- 2) Treatment, planting and evaluation of plots in 2018

During his visits in Turkey, he established the plots on the high mountains and applied the new technics for us about vegetation control with herbicide, planting of seedlings with hoedad, storing of seedling on the cooler in winter time and planting some exotic seedling species, based on California's successful nursery and reforestation practices. At the end of two years, according to the Project conclusions, he wrote a Final Evaluation Report and gave some interesting advices to us. In the light of his advices, we intend to continue to the application on the mountains in the upcoming period.

OGM/Ağaçlandırma Söğütözü/Y.Mahalle/ANKARA Tel: +90 (312) 296 43 02 ibrahimyuzer@ogm.gov.tr

ogm@ogm.gov.tr

Baskanlığı

Bestepe

Mahallesi

Söğütözü

Cad.

06560 8/1



Republic of Turkey Ministry of Agriculture and Forestry General Directorate of Forestry

In respect of the Project, he gave a seminar for the Turkish experts dealing with growing high quality nursery seedlings and shared his experiences with relevant nursery staff for a week long workshop. He also contributed to our afforestation activities to solve some application problems through recommendations voluntarily.

We are also aware of his activities in the USA thanks to the previously submitted papers, documents, presentations and some photos by Mr. JOPSON to the General Directorate of Forestry.

On this wise, it is my honor to nominate Tom JOPSON for the 2019 Francis H. Raymond Award as the General Directorate of Forestry.

Sincerely,

Ibrahim YUZER

On behalf of General Director

Head of the Afforestation Department

General Directorate of Forestry TURKEY

ogm@ogm.gov.tr

8/1



Sierra Pacific Industries

Forestry Division • P.O. Box 496014 • Redding, California 96049 • (530) 378-8000

RE: Nomination of Tom Jopson for the 2019 Francis H. Raymond Award

I have had the pleasure of working with Tom for over twenty-five years, when I first ordered seedlings from his nursery. It was readily apparent that Tom had a passion for the forest environment that went beyond just growing seedlings. It is this passion and inquisitive nature that has contributed so much to all of us that work and play in California's forests.

Tom has helped promote forest management by actively participating in, and supporting groups including the Forest Vegetation Management Conference, and Sierra Cascade Intensive Forest Management Research Cooperative. He has donated much of his time and resources to trying new ideas and techniques in culturing conifer seedlings, always with the goal of improving the ability of forest managers to succeed in their reforestation efforts. And he looks to share his experience and knowledge with the next generation, as evident from his effort to update the California Reforestation Manual.

Tom's quiet contributions could easily go unrecognized except for the fact that over the last few years California has experienced its most devastating wildfires and beetle epidemics. These events have highlighted the critical need for vigorous seedlings and reforestation expertise to assure a forest resource for the future. Through his successful nursery practices, Tom Jopson has been instrumental in achieving this goal for the benefit of all Californian's.

Sincerely,

Mark Pustejovsky

RPF#2583

Reforestation Manager Northern Sierra Area

Sierra Pacific Industries



Sierra Pacific Industries

Martell District • P.O. Box 132 • Martell, California 95654-0132 • (209) 223-7170

RE: Nomination of Tom Jopson for Francis H. Raymond Award:

Dear Members of the FHR Nomination Committee:

I cannot think of a more deserving person to receive the Francis H. Raymond award then Tom Jopson. His ground breaking work on the creation and development of Cal-Forest Nursery and Siskiyou Seed Company into a state of the art operations has provided large and small landowners alike high quality seedlings for many years. Due to his expertise in the nursery growing the highest quality seedlings possible, and his follow up in the field, Tom has been responsible for the successful planting of millions of acres of California forestland including large burns such as the Rim Fire and King Fire.

I think it is important to note that reforestation foresters in the 1980's and 1990's were in the process of learning how to be successful in the reforestation of California timberland. Tom's expertise in growing the highest quality seedlings and his willingness to share his knowledge has allowed many foresters to be successful in their endeavors to grow a healthy forest. I personally went to him many times for his advice. To this day he continues to mentor young reforestation foresters on how to do things right.

As busy as Tom is he still volunteers much of his time for many other projects such as his Lebanon and Turkey Reforestation projects, research projects, and many local community projects. All the above is a testament of how generous and a giving person Tom is and why he is so deserving of this prestigious award.

Sincerely

Craig Ostergaard ·

South Sierra Reforestation Manager

Sierra Pacific Industries



5300 Aviation Drive | Redding, CA 96002 Phone 530.223.2585 | Fax 530.223.1145 info@vestra.com | www.vestra.com

May 20, 2019

GIS, Environmental, & Engineering Services

71900

FHR Nomination Review Committee Board of Forestry and Fire Protection P.O. Box 944246 Sacramento, CA 94244-2460

Regarding: Nomination of Tom Jopson for the Francis H. Raymond Award

Dear Members of the F.H. Raymond Award Committee:

It is with great pleasure and heartfelt enthusiasm that I recommend Tom Jopson for the Francis H. Raymond Award. For the last 40 years, Tom Jopson and CalForest Nurseries have provided the forest community with the very best in nursery stock. Tom's ongoing commitment to produce only the highest-quality, best-surviving seedlings has led him to be the number one choice for all major timber producers for reforestation seed stock.

I purchased my first seedlings from Tom in the early 1980s in my position as Manager of Technical Services for the Southern Pacific Land Company (SPLC). This was a time when clear-cutting and the need for quality reforestation seedlings were in their infancy. The SPLC was at the time concentrating on reclaiming previously burned brush fields. We worked with Tom to develop methods for cone collection, seed extraction, and seedling production – all new to California forestry at that time. His willingness to work with, and alongside, the operational forester has never faltered and he continues to provide leadership and knowledge in the development of better, more successful seedlings.

Tom and CalForest Nurseries supported the many tree improvement cooperatives that developed to improve the genetic diversity and performance of California timberlands lost by years of standing volume taxation. His patience with the cooperative progeny test work and seedling production and willingness to take the extra steps to support the tree improvement research – even at his own expense – again displayed his willingness to go the extra mile to make improvements to California timberlands. Tom also donated countless seedlings to production trials and related projects undertaken by the SPLC and other timber companies at the time. Although the industry and its direction have changed significantly over the years, Tom continues to work with all players to better our state timberlands.

My husband and I (both foresters) purchased 400 acres of timberland the year after the Fountain Fire, the first of the big fires that burned 65,000 acres of timberland in 1994. Our goal was the reforestation and restoration of the property. Without Tom's ongoing commitment to the forest community – including the small private owner – our success would not have been possible. Whenever we were able (which depended on funding cycles for NRCS and CFIP programs), we used CalForest Nurseries for our seedling needs. As funds were limited, our restoration units were

Mr. Tom Jopson May 20, 2019 Page **2** of **2**

usually limited to less than 20 acres in size. Tom never declined a small ownership lot. Small lots are much harder to manage and track than the larger lots of the major timber companies, but he never let us down. Every lot of seedlings we received was always of the highest quality, as though we were a huge, ongoing customer, and usually with more trees than we had planned. We were never charged extra for the small lot or told to go elsewhere. In fact, he would personally arrange to get our small orders of trees on trucks heading to a large timber producer and "tell them" they could store our trees until we could pick them up – again, displaying a true commitment to the forests of California even through the small, private timber producer.

Tom's contribution to forestry in California cannot be truly quantified. I can tell you, however, that 90 percent of all of the successful plantations following clear-cutting or catastrophic fire are planted with CalForest seedlings. Without Tom's dedication and commitment to developing methods to grow seedlings acclimated to our California climate, the success we see would not be possible. His contribution has been huge, his dedication consistent, and his compassion for the industry and timberlands of this state unwavering. I cannot recommend him strongly enough for this award.

Sincerely,

Wendy L. Johnston, RPF 2032 Small Private Timber Producer

Vice President

To: Francis Raymond Award Committee

Re: Tom Jopson

May 20,2019

I have known Tom Jopson for almost 40 years. I first came to know him in the early 80's in my position as reforestation forester with International Paper Company then Fruit Growers Supply company in Siskiyou County California. I clearly remember contacting him as a potential provider of tree seedlings as the reputation of the seedlings from his Covello nursery started to spread. Soon after he moved his operation up to Scott Valley here in Siskiyou county where I went to visit him and was impressed by his knowledge, integrity, and endless interest in tree seedling physiology, growth, and survival. I think what struck such a strong chord was that was also my field of study for my Masters degree at Oregon State University. Obviously we hit it off instantly and have been close friends both professionally and personally ever since.

Throughout the years Tom has exhibited endless enthusiasm in the growth and production of conifer tree seedlings that will survive the rigors of our California climate and develop into the forests of the next generation. When problems develop in the nursery or survival in the field Tom will research the problem with scientific scrutiny and not stop until he has found the answer. If poor survival in the field was the result of something that had occurred in the nursery he would always make good on either replacing the seedlings or providing a refund of seedling cost. He has also been an ardent supporter of reforestation research in the field starting back with the True Fir Management Coop in the 80's and continuing with genetic tree improvement programs and the Vegetation Management Coop. Toms reputation has spread world wide and after a visit to his nursery by a group of foresters from Lebanon over 10 years ago he has made many trips to that country as well as Turkey to aid in the development of seedlings and reforestation practices.

Tom is the most inquisitive and intelligent person I have ever met. His interests don't just stop with reforestation but when heating his greenhouses during winter became a major cost he began research into gasification and has designed and built a number of gasifiers to heat his nursery as a fraction of the cost of propane. The biochar developed from this process has also led into more areas of inquiry and experimentation. Tom is also very involved in his local community in Scott Valley. His nursery is the largest employer in the area and he has served his community well on the school board and watershed councils.

Though he is too modest to ever seek recognition I can not think of a more deserving person for the Francis Raymond award than Tom Jopson.

Charlie Brown

Vice President Northern Operations

Fruit Growers Supply

Retired

FOREST PROTECTION LLC

PO Box 503028, White City, Oregon 97503-0813 (541) 821-3875 | EliasForestProtection@yahoo.com

May 16, 2019

Francis H. Raymond Award Nomination Review Committee CALIFORNIA STATE BOARD OF FORESTRY & FIRE PROTECTION PO Box 944246 Sacramento, CA 94244-2460

Re: Nomination of Tom Jopson for Francis H. Raymond Award

F. H. Raymond Award Nomination Review Committee Members:

Forest Protection LLC supports the nomination of Tom Jopson for the 2019 Francis H. Raymond Award. Tom has demonstrated outstanding contributions to California Forestry through his low budget forest seedling nursery. He saw that there was a need for a tree seedling nursery and established his business which has grown into a very successful hobby and passion. Tom seems to be in the nursery business mostly because he enjoys growing seedlings that are used to reforest vast areas of California and Oregon. He is giving back to society by enabling reforestation of the vast areas devastated by wildfire. Tom has dedicated himself to learning and adapting to produce the finest quality conifer seedlings despite the many obstacles. He grows robust and healthy containerized seedlings that can be planted in harsh conditions.

Tom never refuses a seedling order despite the increasing demand from forest landowners. Even when an order comes in late, he will find a way to accommodate the order by using smaller containers, expediting the seed stratification period, or moving equipment to make room. Tom even recently resorted to growing seedlings in his employee parking lot to meet customer needs during a particularly large order year.

Tom demonstrates a "Labor of Love" when he grows his seedlings and thoroughly enjoys visiting plantations to see his seedlings grow into forests trees. He will eagerly drop to his knees to excavate a seedling with a shovel and with his bare hands to evaluate the root growth and vigor. Tom brought Farouk Salman, Nursery Manger for the Association for Forest Development and Conservation in Lebanon , out to the Bear Trap TS fall planting job where I showed him how to supervise an operational size planting job and also how to plant small container seedlings in real rocky soil using a hoedad.

We appreciate the consistent quality seedlings and packaging that Tom produces which make our job as reforestation contractors successful and ensure that we have satisfied landowners. We encourage you to select Tom Jopson for this duly deserved award.

Sincerely,

FOREST PROTECTION LLC

Eliazar Padilla President Dear Members of the FHR Review Committee,

On behalf of the Board of Red River Forests LLC, I should like to add our voice in whole-hearted support of the nomination of Tom Jopson as recipient of the 2019 Francis H. Raymond Award.

Tom was very much in the vanguard of growing native tree seedlings for California forestland owners at his nursery — he recognized early on that there could be very significant calls on such a resource. While at the annual meeting of our company in 2007, which was held in Redding, about 20 of us took a field trip up to Etna and toured his facility there. Tom was very much on hand, explaining the whole operation with well-justified pride, particularly the viability of the seedlings. This high level of viability has allowed him to produce hundreds of millions of healthy native tree seedlings, including several million seedlings for our investment in reforesting more than 20,000 acres of Red River Forests' lands burned in wild-fires over the past two decades.

As has been said by others, the ability effectively to reforest the large wildfires, that California has unfortunately experienced in recent years, has been and will continue to be greatly facilitated by Tom's efforts.

Apart from his endeavours in California, Tom is an outstanding, vocal and effective advocate of California reforestation and nursery practices overseas. Indeed, one could name him California's forestry's goodwill ambassador to the Lebanon for his efforts in this regard.

Anthony Fouracre

Chair, Board, Red River Forests LLC

Red River Forests is a multi-generational family owned business with forestland holdings in northeastern California within Shasta, Modoc, Lassen, Plumas and Siskiyou counties. Since 1970 the family forestlands have been managed by W.M. Beaty & Associates, Inc., a forest management and consulting firm based in Redding, California

From: <u>Julia W. Gilmore</u>
To: <u>Bob Rynearson</u>

Subject: Nomination of Tom Jopson for 2019 Francis Raymond Award

Date: Friday, May 17, 2019 2:19:56 PM

Hello Bob,

I remember Tom Jopson and our tour of CalFire Nursery in 2007. He did a wonderful job showing us around and explaining the whole process of preparing tree seedlings to get them ready to plant. The stories of gathering the seeds, the process of storing and starting them, along with the limited timeline to deliver them to be planted was very impressive. The greenhouses with all the seedlings were beautiful and very large and required a lot of resources to keep the temperature and humidity right, as well as having the seedlings all marked with colors to separate what type of tree they were and the business they belonged to. Truly impressive. He was not only an expert at his job but he was also truly an expert with people and his ability to convey extensive information. I really valued his ability to find the time to give us such a perfect and fascinating tour. I support Tom Jopson's nomination for the 2019 Francis Raymond Award. Julia Gilmore

beneficiary of Red River Forests LLC

From: Mari Okie-Fouracre
To: Bob Rynearson

Subject: Tom Jopson corrected version

Date: Thursday, May 23, 2019 11:59:40 AM

Dear Bob.

Thank you for sending the information about Tom Jopson. I think he richly deserves the award. I well remember how impressed we all were with the nursery operations and how important it is for us to have such good quality seedlings, habituated to Northern California, for our reforestation programs. Also his, and your work, in Lebanon has been a very rewarding project of international cooperation with benefits to both our countries and people in understanding and maximizing forestry practices in Mediterranean climates.

I'm hoping that the Board can draft a letter of appreciation and corroboration of his nomination for the award on behalf of Red River Forests. I hope their next meeting is in time to approve a letter or they could send it around earlier.

Please feel free to use this letter as part of your arsenal!

In addition ,thank you for another wonderful and constructive Annual Meeting of Red River Forests!--Mari Okie-Fouracre (Former Board Member, Red River Forests LLC)



PO Box 796 Chester, CA 96020-0796 USA 530.258.2111 CollinsWood.com

RE: Nomination of Tom Jopson for the 2019 Francis H. Raymond Award

I feel that there are two main reasons that Tom Jopson is worthy of receiving the Francis H. Raymond Award. First, as president and owner of Cal Forest Nursery he has established a quality program that is unsurpassed. Second, is based on the amount of personal time and energy Tom puts into promoting sound reforestation practices within California.

I have grown seedlings at the Cal Forest Nursery for the past 20 years and have come to trust and respect the work done at this nursery under the supervision of Tom Jopson. I have grown quantities of seedlings at this facility from just a few thousand to well over three hundred thousand and in all cases I was given a superb seedling with excellent support throughout the entire process. No matter what seedling quantity I order I always feel that I am Cal Forests most important customer. I know this type of valued service originates from the top of management.

Tom donates a lot of time promoting sound reforestation practices within California's forestry profession. I have had the pleasure of hearing Tom speak at many forestry conferences and each time I gain valuable knowledge. I know that Tom is also a part of various forestry research groups and independent projects again giving his time and expertise to the many fields of reforestation.

Without hesitation, I support Tom Jopson for this prestigious award. I feel he represents the personal character and virtues that this honor represents.

Sincerely,

Eric O'Kelley (RPF #2802)

Collins Pine Company



TIMBERLAND MARKETING AND NATURAL RESOURCE CONSULTING

May 22, 2019

California State Board of Forestry and Fire Protection Mr. Matt Dias, Executive Officer PO Box 944246 Sacramento, CA 94244-2460

RE: 2019 Francis H. Raymond Award

Dear Matt,

I am writing on behalf of Landvest, who manages 185,000 acres of California timberland, to support the nomination of Tom Jopson for the 2019 Francis H. Raymond Award. Tom has for the past 30-years grown *hundreds of millions* of conifer seedlings, while sharing his knowledge and support of the forest regeneration science, unreservedly.

While you can rely on other letters that detail Tom's long list of accomplishments, I want to attest to his personal generosity in the area of public service, including his essential role in the upcoming California Reforestation Manual. His business has been the linchpin of reforestation efforts for countless wildfires which replanted forests will reflect his tireless efforts for decades to come.

Let me conclude with this request: The 2019 Francis Raymond award could not find a more deserving recipient than Tom Jopson and I hope you will give him favorable consideration.

Very truly yours,

Arne Hultgren, RFP #2581 Special Projects Forester

Ame Hultgran



Corporate Office

0.530.841.2630
F.530.841.2632
PO Box 886, Yreka, CA 96097
746 S. Main St., Yreka, CA 96097

jeffersonresource.com

May 28, 2019

Attn: FHR Nomination Review Committee Board of Forestry & Fire Protection PO Box 944246 Sacramento, CA 94244-2460

RE: NOMINATION OF TOM JOPSON FOR THE 2019 FRANCIS H. RAYMOND AWARD

It is a privilege and rewarding experience to have Tom Jopson as a colleague. I without hesitation recommend him for consideration for the Francis H. Raymond award.

I have worked with Tom since 2000 when I worked as a Pest Control Advisor/RPF for United Agri Products in the field of reforestation and vegetation control. At that time, Tom was honing his skills in growing high quality seedlings. It has been known in reforestation that Tom Jopson's, CAL Forest Nursery in Etna, CA grows superior conifer seedlings due to his in house research and guidance. Tom's inquisitive mind guides him to be an outside of the box thinker in the truest sense.

In 2013, Tom came to the Forest Vegetation Management Conference (FVMC) where I was the program coordinator. His vision was to form a committee to capture the reforestation knowledge that was known to members of our conference but not to the public at large. His idea was to re-write the 1971 Reforestation Manual of CA., especially in light that within the next decade or so, many of the pioneering reforestation professionals would be retiring. The following year, the FVMC voted to form a new Forest Legacy Committee and appointed Tom Jopson chair. With work for the committee, but Tom at the helm, the FVMC obtained a grant for the re-writing of the manual. Under Tom's leadership the manual has been rewritten and exceeds 450 pages and is in peer review in the UC system.

Tom's mark on forestry, especially in the arena of reforestation is immeasurable. He is a forward thinker that is always striving for improved ways of doing things. I ask the committee to sincerely consider Tom Jopson for this prestigious honor. There are few that are as deserving as him.

Sincerely,

Danielle Lindler

CEO

Registered Professional Forester # 2691
Pest Control Advisor #70419



Re: Nomination of Tom Jopson for Francis H. Raymond Award

Dear Members of the F.H. Raymond Nomination Committee,
I have known Tom for over 30 years, with extensive work done with him during and
after the Fountain Fire of 1992. After not getting the survival with Douglas-fir and white
fir as we would have liked, we found dark out technology in Canada. Tom took the risk
and made a huge investment in his nursery. That investment took seedling quality in
California to a whole new level, since that time the survival of Douglas-fir and white fir
have increased dramatically. Mixed conifer plantations are now a reality. The majority of
seedlings being planted in California are coming from Cal Forest Nursery

Tom has selflessly contributed to improved seedling survival and forest establishment locally and around the world. He has contributed to the local Sierra Cascade Intensive Forest Management Coop, North Sierra Tree Improvement Association and the Forest Vegetation Management Conference. He provided the seed money and leadership to get the California Reforestation Manual updated. Internationally he has made significant contributions in Lebanon and Turkey to improved nursery technology and forest establishment. All of this has been at his own expense. He is constantly seeking to improve seedling quality and establishment success.

Our forests are better today because of Tom's efforts.

Sincerely,

Jeff Webster

RPF 2182

Lennart Lindstrand, Jr. 5037 Debbie Ln. Redding, CA 96002-4016 (530) 221-3412

May 18, 2019

Mr. Robert G. Rynearson W. M. BEATY & ASSOCIATES, INC. PO Box 990898 Redding CA 96099-0898

> Re: Tom Jopson Nomination Francis H. Raymond Award

Dear Bob:

This letter is to advise of my support for the nomination of Tom Jopson to receive the 2019 Francis H. Raymond Award.

Tom has been a leader and innovator in California reforestation for decades. Tom Jopson's Cal Forest Nurseries have long been recognized as producing quality reforestation stock for large industrial and non-industrial forestland owners. In addition to filling the reforestation needs for large clients, he has always been willing to accommodate small seedling orders for smaller landowners such as myself. This willingness to fill small orders is appreciated since most other forest nursey services are only available out-of-state.

Tom would be a fitting recipient of the Francis H. Raymond Award.

Sincerely,

Lennart Lindstrand, Jr. California RPF 624



ay 22, 2019

Dear Members of the Francis H. Raymond Award qomination Committee,

I would like to support the nomination of Tom Jopson for the 2018 Francis H. Raymond Award in recognition of his innovative and energetic work that has contributed to the management of California's natural resources over the past five years. As we have seen with the increasing scale and severity large wildfires over the past few years, the need for successful reforestation in our sunny but harsh (especially for seedlings) Mqditerranean climate will only grow. In addition, California's increased commitment to replacing fossil fuels wherever possible will require innovative approaches that go well beyond more windmills and solar panels. While we are now in a period of enhanced state governmental funding for many forestry initiatives, the long run success in achieving our lofty goals will depend on promoting as many innovators as possible to work together by sharing their insights and skills to address shared challenges.

These are three areas where Tom Jopson has brought his unique mix of energy, creativity and implementation skills to improve the management of our natural resources. It is well documented and described by others how Tom led the Cal Forest nursery to become a world-leading conifer seedling nursery that has been willing to radically change its business processes to meet the unexpectedly high and episodic demand for quality conifer seed and seedlings to reforest massive wildfires. Without such a company based in California to be a player in massive reforestation projects, it is likely that California's forests would not be able to continue to sequester carbon at the current rates.

As a businessman, Tom realized that his nursery uses a variety of industrial heat and electricity that often come from fossil fuels. In addition to running the nursery, Tom also invested considerable amounts of his own expertise, energy and finances to develop and improve small scale gasifier units that could be fired with waste wood, were robust enough to truly work in harsh field conditions, and could be integrated into operations to use all the products – heat, electricity and biochar. While well funded agency and academic laboratories may get more funding, more efforts like Tom's to create workable prototypes that can meet very common uses of fossil fuels will be vital for California to make progress towards its lofty goals.

Finally, Tom fully realizes the importance of active engagement with many circles of professionals and community members. In addition to his considerable community involvement in and around Scotts Valley, he was a driving force in bringing professionals from the reforestation community together to pull the reforestation 'best practices' together and drive the creation of a new sourcebook for reforestation for California. He used his endless drive to collect experts and help move what is a long and complex process along.

In all of these cases, he has put considerable amounts of his own time and money into products and processes that are often considered too challenging for larger agency or academic institutions to attempt. Finally his endless humor and positive spirit have helped keep his many colleagues working together to donate their time and energy for the larger good.

Sincerely,

William Stewart Forestry Specialist

billstewart@berkeley.edu q



Forest Service Pacific Southwest Research Station 3644 Avtech Parkway Redding, CA 96002 Phone: (530) 226-2550 FAX: 530-226-5091

May 20, 2019

Dear Bob:

I am writing to support your nomination of Tom Jopson for the 2019 Francis H. Raymond Award. Not only is Tom a significant contributor of forest regeneration by raising the quality seedling stock as you stated in the nomination letter, he is also a strong supporter of forest research. I recalled that when we decided to study on the carryover effect of fertilization and herbicide at first rotation on plantation growth at second rotation in ponderosa pine in 2012, we could not find enough fund to cover all three Garden of Eden sites. Tom volunteered some dollars from his company in order to move the project forward. With his generous support, we were able to harvest and to replant three second-rotation Garden of Eden sites. Today, these replanted trees are their sixth growing season. We address following questions:

- Can a ponderosa pine plantation sustain its productivity in the second rotation as compared to its first rotation?
- Is carryover effect significant from the treatments applied in the first rotation?
- If so, what factual evidences are there for and against productivity change?
- What silvicultural interventions can help sustain the yields?
- How much do genetically improved seeds contribute to 2nd rotation productivity?

Information will help foresters to plan future plantation management and to manage their land more economically.

I strongly support Tom's candidacy for the Award!

Sincerely,

Jianwei Zhang (jianweizhang@fs.fed.us)

Research Forester



From: McElroy, Keli M -FS
To: Bob Rynearson

Subject: Nomination of Tom Jopson for 2019 Francis Raymond Award

Date: Tuesday, May 28, 2019 6:26:12 PM

Attachments: <u>image001.png</u>

Dear Bob.

I have reviewed your nomination letter and narrative and support the nomination of Tom Jobson for the 2019 Francis H. Raymond Award. In my capacity working for the Forest Service, overseeing the timber and silviculture programs for the Shasta-Trinity National Forest, I have had the pleasure of working with Tom on several occasions. The most notable has been his efforts on the new California reforestation practices manual, especially considering that the prior edition is over 40 years old. Tom recognized that many of the experts in reforestation across California were nearing retirement. Fearing the loss of so much collective knowledge, he took the initiative to secure funding and willing experts to document the complicated steps involved in successful reforestation. Tom's team of experts were chosen from private industry as well as state and federal agencies, and edited by UC Berkley, bridging the gap across all land ownerships and interests. Working with so many experts derived from different management backgrounds is highly challenging, and Tom always remained positive and constructive, with his eye on the finish line.

In addition, through my participation on the board for the Forest Vegetation Management Conference, and occasional ad hoc participation in the Forest Management Research Cooperative, I have seen firsthand Tom's dedication to the field of forestry. His drive for creative problem solving has contributed to interesting research opportunities. Tom is universally regarded as an expert in seedling procurement and never fails to educate.

Thank you for the opportunity to support the nomination, as I can't think of a soul who would be more fitting.

Best of Luck, Keli



Keli McElroy Vegetation Program Manager Forest Service Shasta-Trinity National Forest

p: 530-226-2354 kmcelroy@fs.fed.us 3644 Avtech Parkway Redding, CA 96002

Caring for the land and serving people



North Sierra Tree Improvement Association

PO Box 990898, Redding, California 96099-0898

May 28, 2019

Francis H. Raymond Award Nomination Review Committee CALIFORNIA STATE BOARD OF FORESTRY & FIRE PROTECTION PO Box 944246 Sacramento, CA 94244-2460

Re: Nomination of Tom Jopson for 2019 Francis H. Raymond Award

Dear Francis H. Raymond Award Nomination Review Committee:

The North Sierra Tree Improvement Association (NSTIA) fully supports the nomination of Tom Jopson, owner and founder of CalForest Nurseries, for the 2019 Francis J. Raymond Award. Tom demonstrates an uncompromising eagerness to provide the highest quality seedlings to meet the ever-increasing reforestation needs of California's forestlands. Growing seedlings is a passion for Tom. His devotion to container seedling development and testing leaves the impression that Tom provides nursery services primarily as a philanthropic benefit to his customers with any economic gain to his business as a distant and subservient objective.

CalForest Nurseries is not a member of the NSTIA; however, Tom and his staff have been a vital partner to the NSTIA. Tom eagerly participates in activities of the NSTIA. He consistently provides invaluable insight and enthusiasm for seedling and root stock growing services to the NSTIA. Tom has grown and transplanted many high-quality rootstock at his nursery for many years of development of the first and second generation NSTIA superior ponderosa pine seed orchard. Tom brings expertise to the NSTIA regarding irrigation system development and management. Tom understands the need for and is so passionate about supporting the growth of superior seedlings for reforestation needs, that he freely donates his time and services to the NSTIA. Tom provides use of the CalForest Nurseries facilities and equipment to the NSTIA to further the efforts of the NSTIA at no cost. Tom is a phenomenal partner and supporter of the NSTIA superior tree orchard.

We encourage you to select Tom Jopson for this award and we thank you for your consideration of this nomination.

Sincerely,

NORTH SIERRA TREE IMPROVEMENT ASSOCIATION

Scott P. Carnegie

Chairman

The North Sierra Tree Improvement Association is comprised of companies, managers, individuals, and agencies, who own, manage, or service forestland within the boundaries of the Association and have an interest in tree improvement programs which will be mutually beneficial and in establishing standards and specifications for selecting and protecting superior trees and in maintaining records of their locations, establishment of evaluation plantations, and sharing knowledge concerning use and performance of improved forest reproductive materials. Members of the North Sierra Tree Improvement Association include the California Department of Forestry and Fire Protection, Fruit Growers Supply Company, Shasta Cascade Timberlands LLC, Pacific Gas and Electric Company, Sierra Pacific Industries, Soper-Wheeler Company, and W. M. Beaty & Associates, Inc.



California Forest Pest Council

Dedicated to protecting California's forests since 1951

www.caforestpestcouncil.org

May 29, 2019

Re: Support: Tom Jopson nomination for the Francis H. Raymond Award

The Executive Committee of the California Forest Pest Council (CFPC) reviewed the nomination letter and narrative of Tom Jopson for the Francis H. Raymond Award and fully supports his nomination.

To sustain the long-term health of California's forests it is critical to provide landowners and reforestation foresters an abundant and affordable supply of vigorous, healthy native tree seedlings, in a variety of species and from locally adapted seed sources. As described in the narrative for his nomination, and the many support letters, Tom's tireless and unselfish devotion to forestry has been instrumental in providing hundreds of millions of such seedlings to meet the reforestation needs of California.

Tom also promotes California's forest health by contributing his time and resources to field studies, research and passing on his and others' expertise that educate reforestation foresters and facilitate the successful completion of reforestation projects. Along with the numerous contributions described in the narrative and support letters, Tom also contributes to CFPC's summer field tours. These educational tours often include more than 100 hundred foresters, reforestation contractors and others involved, or otherwise interested, in forest pest management.

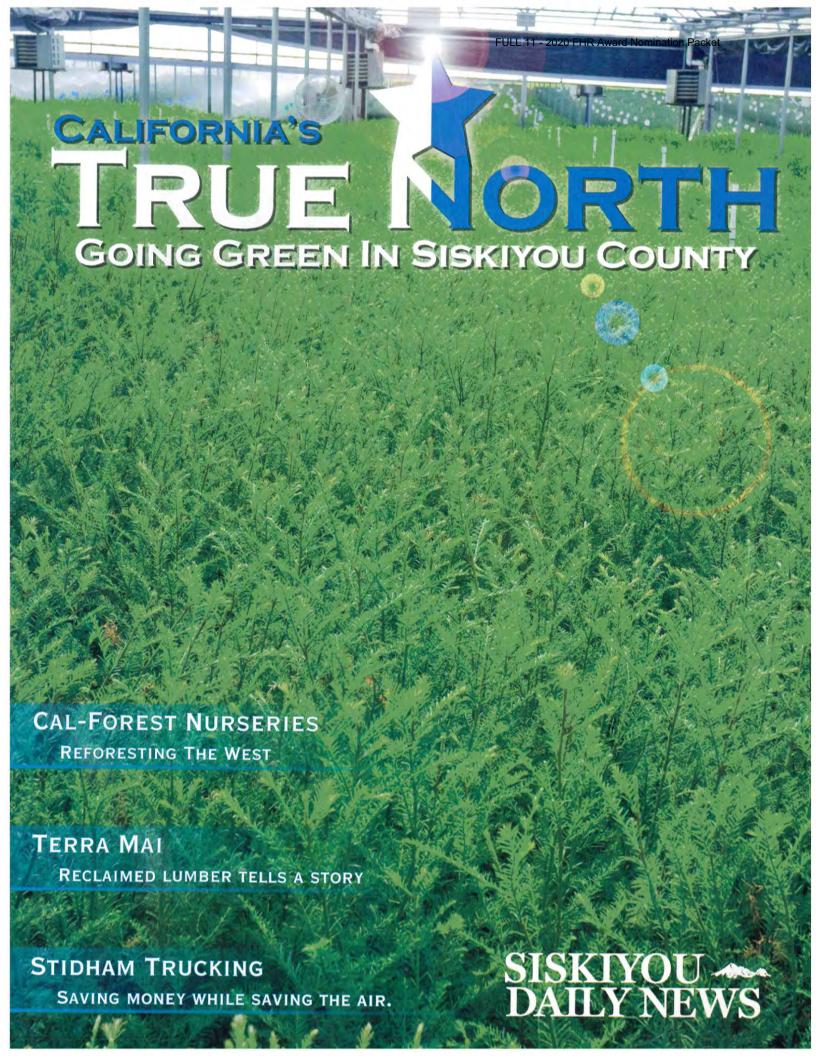
Tom Jopson is very deserving of the Francis H. Raymond Award to Tom Jopson and honoring him with it would also send an encouraging message to Californians that dedication to the science and practice of regenerating our forests contributes to long term forest health.

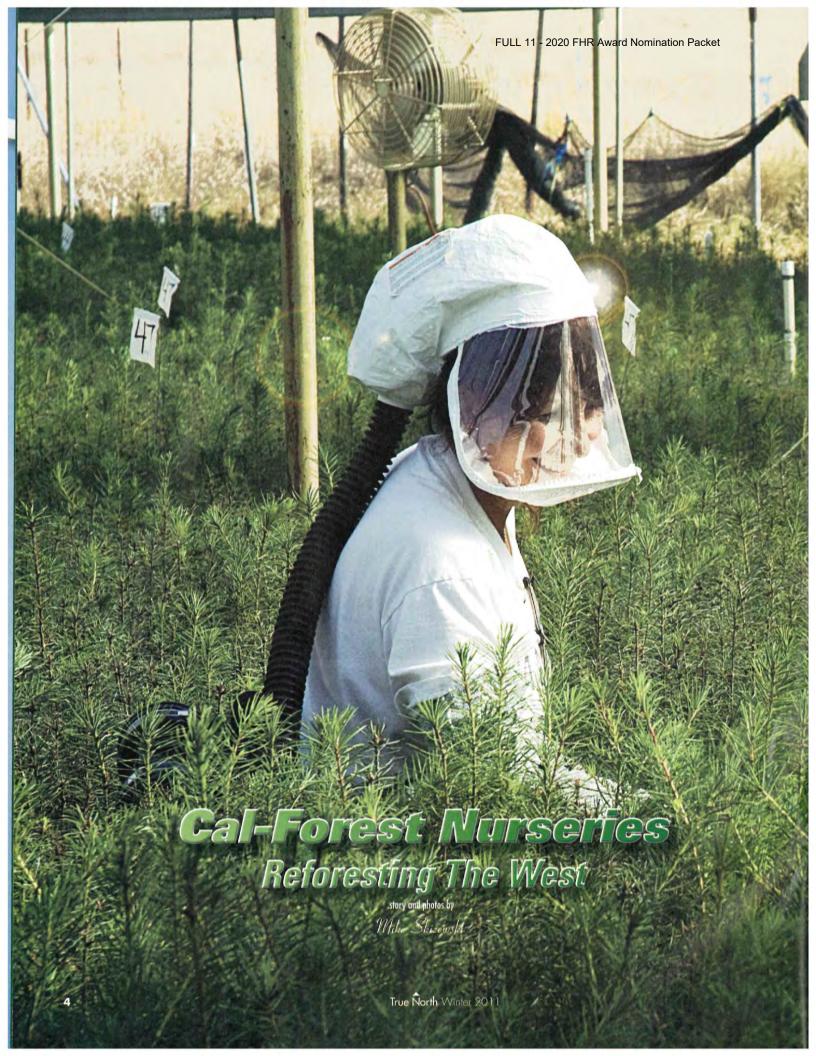
Sincerely,

Bob Rynearson

Chairman, California Forest Pest Council

The California Forest Pest Council was founded in 1951 and is a non-profit educational organization of over 800 public and private forest managers, researchers, foresters, entomologists, pathologists, biologists, and others interested in the health of California's forests and protection from damage caused by animals, diseases, insects, pollution, and weeds.





t's existence has almost been a well-kept secret. But Sally Duguay has been with the company for five years. Nora Alderson has had her job for 11 years. Grower Rosario Aragon has 19 years in. Vicky Campbell has "been here since Tom came to Scott Valley and said, 'I want to start a nursery.'"

That would be back in 1988, when Tom Jopson moved his then-10-year-old reforestation nursery business from Covelo, Calif. to the

valley.

These days, Cal-Forest Nurseries, which grows conifer seedlings for reforestation, is a thriving concern with acres of greenhouses. Located several miles southeast of Etna, the company employs 40 people seasonally, and has a full-time staff of 25-30.

And last year – the best one yet for Cal-Forest – the nursery grew and shipped between 16-17 million seedlings to its clientele, made up of private timber companies, small private landowners and public agencies such as the U.S. Forest Service.

That's up from 1.1 million seedlings in

Jopson's first year, 1978.

He established the business in Covelo, which is in Mendocino County, with the support of his wife of 33 years, Dr. Sari Sommarstrom an environmental consultant who works with the Scott River Water Trust.

"The town is even more remote than this," Jopson said one day this October. "We said, 'This is even more cosmopolitan than Covelo!'"

Jopson and Sommerstrom are native Californians.

"Sari's grandparents were Swedish immigrants; they came here before World War I," Jopson said. "Her grandfather got into construction; he built minesweepers (they were wooden ships then), and as a contractor, his most prominent building was the California Hotel, which can be seen right off of (Interstate) 580 just before the Bay Bridge from the north.

"My grandfather had a nursery in the Bay Area," he continued. "He actually arrived in San Francisco the night before the 1906 earthquake. Eventually he started a nursery, and they brought in stuff from Australia; they bred different things ... it was one of the prominent nurseries in California in the '30s and '40s."

How did he get to Scott Valley?

"I got to know (longtime valley rancher) Keith Whipple," Jopson explained. "We were good friends and I could see Covelo was not a very good place.

"In 1986 we started talking about moving the nursery up to Scott Valley; we were getting more clients from up here and the transportation was a lot better, so it made sense to do it," he continued.

Jopson was a bit surprised by how much

Facing Page: Rosario Aragon, is a grower at Cal-Forest Nurseries, "responsible for growing the crop all the way from germination till they're ready to pack," Below: Cal-Forest Nurseries owner Tom Jopson, left, and longtime employee Vicky Campbell of Etna talk in the seed lab - where seeds are soaked in one of the first steps of the process to ready seedlings for timber companies, public agencies and private landowners.



FULL 11 - 2020 FHR Award Nomination Packet

his good friend wanted him to move to the valley.

"I was talking to Keith and we were thinking this could work, and Keith is a doer, not a talker, and we never really talked about how big it was going to be, but we came back up and he had this great big pad built," Jopson said with a wry smile. "At the time, we thought it was way too large, and Keith said, 'Oh well, I just started hauling dirt.' He got the last laugh, though, because we're now two-and-a-half times the size of the original pad, and with Fort Jones added in (see Mountain Crest Gardens sidebar), three-and-a-half times as big, so he laughs at me pretty regularly about it."

Whipple was also from the Bay Area originally, but he had been ranching in Scott Valley since 1956. He and Jopson met in the valley

"When they wanted to put in the Second Homes subdivision up on the hill here, a bunch of us ranchers opposed it, and Tom came up from (UC) Davis to help us out," Whipple recalled recently. "He worked with us as an environmental scientist.

"We were able to delay the process long enough that they finally gave up on the subdivision," Whipple continued.

"So I knew Tom had a small nursery down in Covelo, and we got to talking about moving it up here"

The new friends became partners in the business when the decision was made on the move to Siskiyou County; it's a partnership that lasted until 2004, when Whipple, who is some years older than Jopson, sold his interest to his good friend.

Back to Jopson:

"So in January of 1988, we built a 120 x 120 building (on the site)," Jopson recalled. "Oh, God, it was cold! – working with metal, and there was lots of snow."

But he succeeded in getting the business off the ground without missing a growing season.

"The first year here we grew about what I was growing in Covelo, about 1.1 million trees. Our biggest year ever was last year, between 16 and 17 million seedlings, all trees for reforestation," he continued. "Ponderosa pine is our number-one conifer, then Douglas fir is number two, then sugar pine, red and white fir, redwood and other commercial conifers. We also grow some other odd things such as bitterbrush; we've grown quite a bit of it for the BLM (Bureau of Land Management), and we grew a lot of stuff to plant on Angel Island in San Francisco Bay."

True North Winter 2011

These days, the private timber industry accounts for about 75 percent of Cal-Forest's business.

"We grow nearly all the trees used in California these days for private industry," Jopson said.

The other 25 percent of the business comes from the U.S. Forest Service, BLM " ... and a small amount for the state and private clients."

The business arrangement works very well for Cal-Forest.

"The nice thing about it is it's all contracted beforehand, so we're not guessing what to grow," he continued.

"The way this works is the industry in particular, and the U.S.F.S., provide us with cones – they're usually available every 10 years or so (from a conifer, on average). They collect the cones for the seed in seed zones they identify, and they try to collect seeds from every seed zone and every 1,000 feet in elevation," Jopson explained. "And in kind of an ongoing process, they ID 'plus' trees, which are growing better than their neighbors in various places.

Cal-Forest Nurseries owner Tom Jopson is an innovative handyman.

"We make a lot of our own equipment," he said as he showed the shop facility inside one of the greenhouses where a lot of that equipment is constructed.

His pet project now – three-and-a-half years in the making – is a "gasifier," which stands outside, between two of his greenhouses.

"I'm building a wood gasifier," he explained. "We'll make 'producer gas' (carbond monoxide and hydrogen). The purpose here is to heat our greenhouses with wood. I'll buy wood from, say, Jimmy Johnson, a local logger. The wood he sells me he gets as pay from a timber company, so the logger makes money, I reduce my heating costs, and the timber company gets work done that wouldn't otherwise get done.

"I get a stable cost for my heat, rather than using propane for heat, because the cost of propane goes up and down."

In other words, it's a win-win-win situation – and Jopson can also generate some electricity from the process.

"We're talking about 700 tons of wood annually that would otherwise just be burned in open fires.

"My goal is to make it cheap, but in the process, everybody wins."

"They keep track, bring them in to a seed orchard, and graft them onto root stock, then they also take the seed from those trees and grow those in test sites (tree plantations) in various climatic areas. That has formed the basis for a 10-20 percent improvement in wood production, which is better than they had hoped; they had hoped for 5-10 percent better.

"It's been a good thing and it is ongoing. We help them with the logistics. We've tried to participate in whatever way we can, because to the extent they're successful, we're successful."

At this point, Jopson had a strong point to make.

"People have this idea that timber companies just come in, cut, make their profits, and don't have any incentive to put money back in, to invest in the ground. And we're living proof that that is not true."

Why the misconception?

"Some people believe (the wrong thing) because they think – what companies these days do 70-year investments? But they do; they're making at least a 50-year investment.

"(Timber companies) are sort of demonized wrongly about their practices," he continued. "If people went out and observed the practices, they would feel comfortable that the land is being treated properly and the forest is being restored," he explained.

"It's not pretty when it happens, but they're doing it responsibly to get the best possible result to get the most lumber produced over the long run. People should feel comfortable that when they see a timber harvest area, there will be forest there again; even in about 10 years, these areas start turning green again."

Jopson said that he tries to hire just from people who live in the area.

"Sometimes we hire labor crews, and they're often the same people that plant the trees," he said – that is, Jopson will go first to his seasonal employees whenever he hires for special projects.

"We have about seven acres of greenhouse and another four acres of outdoor growing space," Jopson continued. "We have the space/capacity to grow about 20 million trees per season.

"Typically what happens is, every year clients will tell us, for example, 'We want 30,000 white fir from here, 40,000 red fir from here (climatic zones/forest elevations).' We have a list of their seed with information about the quality of that seed. What we do then is make a request to them for seed based on their needs, so they provide it to us."

Jopson said that occasionally private clients will get their seed from the state.

"California has a nice seed bank," he said.

"We then treat the seed, or stratify the seed – that is, soak it, then refrigerate it for a period of time up to three months," Jopson explained. "That improves both the percentage and the speed, or rate, of germination.

"They're now ready to germinate. We fill styrofoam containers with growing media – peat moss, peat moss bark from over in

Cal-Forest Nurseries 1838 Eastside Rd. P.O. Box 719 Etna, CA 96027 530.467.5211 530.467.5733 (fax) contact@calforest.com www.calforest.com



True North Winter 2011

Left: Jopson examines a bag of white fir seed in the refrigerated "cold room" in the seed lab building. Seed bags are coded for identification. The names white and red fir come from the color of the seeds.

FULL 11 - 2020 FHR Award Nomination Packet planting."

Shasta Valley, and vermiculite – then we have a machine that fills the growing blocks, and then they go into a vacuum seeder we have that fills about upward of 12 blocks a minute, so we can sow up to 1,800 a minute."

The process involves filling the container, putting seed in the container, and covering it

so it's ready to germinate.

"Then they go on metal racks that form our benching system, after which they go in our greenhouses, where we apply some heat and do various things to different species to help them continue to grow. We also fertilize through the irrigation water."

Some species need shade, " ... so we spray a shade compound, just a whitewash

bascially, on the roofs."

Red and white fir need a lot of shade; sugar pine, western red cedar, mountain hemlock and western hemlock need it to get through the hot season.

'So that goes on through summer," Jopson continued. "Then there are certain practices we use on some species to 'set bud' - that is, get them ready for winter dormancy."

Jopson said the growing season is typically March through "maybe part of September. So in seven months they're grown and ready to ship, and we do indeed ship some in September sometimes. We have to have them in storage or shipped by mid-February,

"We will store them one of two ways, either refrigeration at just above freezing, or just below freezing for longer-term storage," he said. "You can store them for up to five or six months, and they don't deteriorate too much. They're all palletized and they go into refrigerated vans (semis); we ship them as far as Colorado, Arizona, New Mexico, South Dakota, Montana and even to Alaska."

The last leg of the Alaskan journey for such conifers as Alaska yellow cedar and Sitka spruce on their way to Petersburg in Southeast Alaska and to the Palmer Peninsula outside Anchorage is by container ship from Seattle, Wash.

It's a rewarding business for Jopson and his employees - whose affection for their emplayer is obvious even to the casual visitor; it is undoubtedly one of the main reasons for the longevity of so much of Cal-Forest's workforce.

And the green benefits - the immense value to the forests of the West (and occasionally the East as well) and the public - is unmistakeable.

Jopson's old friend Keith Whipple reflected on his own foresight back in 1988, when - with the rancher's urging - Jopson made the move to Scott Valley.

"He wanted just a small deal (to start business was going to boomerang, and it









Nora Alderson has worked for Tom Jopson for more than 11 years, first at the main nursery outside Etna, and, since 2003, at Mountain Crest Gardens, another set of greenhouses located on Scott River Road just behind the local U.S. Forest Service ranger district complex.

Alderson co-manages Mountain Crest Gardens with Laura Arami. The greenhouses are used for Cal-Forest's overflow, "but the main thing here is succulents," Alderson said. "Basically what we grow here is sempervivum, commonly called 'hens and chicks.' We have a huge number of varieties."

Much of the selling is done through Mountain Crest Gardens' website, mountaincrestgardens.

"We've grown decorative plants for green roofs, mostly in the Bay Area," Alderson explained, and the company has often helped the client design the roof.

A green roof doesn't refer to its color; it "is a roof of a building that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane. It may also include additional layers such as a root barrier and drainage and irrigation systems," according to Wikipedia. "Also known as 'living roofs,' green roofs serve several purposes for a building, such as absorbing rainwater, providing insulation, creating a habitat for wildlife, and helping to lower urban air temperatures and combat the heat island effect."

That isn't the only use for the succulents that Mountain Crest Gardens grows.

"They're also used, mixed with flowers, for table decorations," Alderson said, "and they're becoming very popular in wedding bouquets."

The "hen" is actually the mother plant; the "chicks" are the smaller offshoots it grows.

"These are the moms," she said, holding the large part of a growing sempervivum. "We remove the chicks, re-root them, and sell them, and then the moms grow new chicks, usually once a year in the fall. The chicks should be rooted by January and then they're ready

to sell. March is when the selling season starts, and and it usually runs through May."

The varieties are very hardy, Alderson explained.

"They can survive down to Zone 4, with -30 degrees F as its low range."

Mountain Crest Gardens sells its plants all over the United States,

It was early fall when Alderson was describing the business.

"This week alone, we're shipping to Connecticut, Rhode Island, Florida and Minnesota," she said.

With a thriving business already in Cal-Forest Nurseries, why did Tom Jopson start this second company back in 2003?

"He likes to try new things," Alderson said, "and this idea just interested him."