

Focus on Christmas Trees

Profile of a Sustainable Christmas Tree Grower

Although Aubrey and Linda Raper moved to the mountains in Madison County, NC, to raise their children, they also quickly learned how to grow Christmas trees. They had no previous farm experience before growing burley tobacco, tomatoes and Christmas trees in 1977. From the beginning of their farming career, they were against the idea of using pesticides, both philosophically and pragmatically.

The Raper family saw firsthand the detrimental effects of pesticide use in Avery County. Avery County was the first county in North Carolina to grow Christmas trees. The growers in Avery County used large amounts of herbicides to kill the ground-cover beneath the trees which resulted in larvae in the soil feeding on the tree roots. The Rapers also realized that pesticides are expensive. Most Christmas tree growers use pesticides such as Round-Up and Di-Syston. The Extension Service in Madison County estimates that the herbicide Round-Up costs about \$15 per acre per year and the insecticide Di-Syston costs about \$3 per acre per year. Other pesticides may also be used by growers, but the amount and type varies by grower.

The Rapers have a 65 acre farm, three acres of which are set aside for growing Christmas Trees.

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Facts about Christmas Trees

- Before the 1950s, Christmas trees came primarily from the forest. Today about 98 percent of all trees in the US are grown on farms (*Tree Farming: Environmental Benefits*).
- Christmas trees are grown in all 50 states. The states that produce the most Christmas trees include Oregon, Michigan, Wisconsin, Pennsylvania, California and North Carolina (*Christmas Tree Facts: Fun Facts and Figures*).
- There are approximately one million acres of land in Christmas tree production in the US. There are about 15,000 Christmas tree growers and 100,000 workers (*Christmas Tree Facts: Fun Facts and Figures*).
- In 1996 there were 31 million Christmas trees sold nationwide (*Sales Figures: Fun Facts and Figures*).
- Sales of North Carolina Christmas trees totaled \$78 million in 1996. Trees accounted for \$72 million; wreathes, roping and greenery accounted for \$6 million (*1997 North Carolina Christmas Tree Survey*).
- There were 34.2 million Christmas trees on 23,530 acres of land in NC in 1997. Ashe County produces the most Christmas trees in North Carolina, accounting for 9.8 million Christmas Trees (*1997 North Carolina Christmas Tree Survey*).
- There are approximately 1,600 Christmas tree growers in NC. Two-thirds of growers have operations over ten acres in size. The average Christmas tree grower has three acres of land in Christmas tree production (*1997 North Carolina Christmas Tree Survey*).
- The largest 60 growers in NC have Christmas tree operations of 100 or more acres. They account for less than four percent of the growers, but they produce over 51 percent of the Christmas trees (*1997 North Carolina Christmas Tree Survey*).
- The smallest growers in NC have an average of three acres of Christmas trees. They account for over 66 percent of all growers and yet they only produce 10.7 percent of the Christmas trees (*1997 North Carolina Christmas Tree Survey*).

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SAF is a 501(c)(3) non-profit organization whose mission is to bring students and farmworkers together to learn about each other's lives, share resources and skills, improve conditions for farmworkers, and build diverse coalitions working for social change.

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SAF is supported by the NC Community Shares, NC Migrant Education Program, the Migrant Health Program, Kate B. Reynolds Charitable Trust, the National Community Service Trust, Church Women United, Fund for Southern Communities, Funding Exchange, and the Center for Documentary Studies.

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Published by SAF

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Sustainable Grower *continued from page 1*

They grow about 1300 trees per acre, and there are about 3900 Christmas trees growing at any given time, in all stages of growth. They grow Fraser Firs which are native to the mountains of Western North Carolina. Every year they harvest about 1,000 Christmas trees. Fraser Firs grow for about three years in a seed bed, and another two years in a line out bed. They are typically about five years old before they are transplanted into the fields. This process of growing them in a nursery before in the fields is necessary for the trees to establish a large enough root system to survive the competition of weeds for nutrients. The trees typically have 16-18 inches of roots before being planted in the fields. The trees then grow in the fields for another six or seven years, making them about 12 years old before they are available to consumers.

The Rapers have never employed hired labor; with the help of their three children they have managed to do all the work themselves. Rather than spraying their fields with herbicides, they use a sickle mower and weed eater to cut the ground cover underneath the trees. They have only had minor problems with insects. Even when there was an outbreak of twig aphids one year, they only lost a few trees. They believe that the benefits of sustainable agriculture outweigh the negative side effects and expense of applying pesticides.

However, the Raper family needed to start using herbicides in 1983 when the first trees they planted had grown for five years.

There was not enough space between the trees to use a mower and the only other option would have been to space the trees out more, yielding fewer trees per acre. The Raper family uses a mild herbicide for 2-3 years underneath each tree, during their last years of growth. They are also experimenting with Fish Emulsion, a byproduct of fish that is rich in nitrogen. Rather than using other ammonia products such as ammonium nitrate, they are testing whether the natural byproduct of fish will make the trees greener.

Not all the trees that the Rapers grow are of market quality, so they established a business in mail-order wreathes. In 1980 they sold only to family and friends. They now sell about 300 mail-order wreathes a year. Aubrey expects the tree production to wane in the future; this year he only set 500 trees, whereas in years past he set 1,000. Trees take up a lot of ground space and a lot of time. The wholesale price of trees has also remained fairly constant for the last 16-18 years. The Rapers have begun to grow more vegetables, selling their mixed vegetables in places such as Durham, Chapel Hill, and Wilmington.

SAF has sold Christmas trees grown using sustainable agriculture for the past three years in the Triangle area. This is our second year working with the Raper family to sell their insecticide-free Christmas trees.

Interview with Aubrey Raper, Sustainable Christmas Tree grower, Madison County, North Carolina.

!!HOLIDAY ITEMS FOR SALE!!

Insecticide-Free Christmas Trees \$45.00

Beautiful 6-7 ft. Fraser Fir Christmas trees grown in the Appalachian Mountains of North Carolina. Your purchase will help Certified Organic Growers Aubrey & Linda Raper continue to use sustainable practices.

There is a limited supply of trees. To make sure your tree is reserved, call the SAF office a.s.a.p.

The trees will be available for pick up:

December 4 and December 7-11, M-F, 8:30 am - 6:30 pm at the SAF office. To arrange a pickup time on the weekend, call 660-3652.



Directions to SAF, 1317 W. Pettigrew St., Durham: From Hwy 147 / Durham Freeway, take exit 14 / Swift Ave.; Travel north toward Duke East Campus/Downtown; Take your first right onto Pettigrew St.; The SAF office is in Room 104 of the Lyndhurst Building / Center for Documentary Studies.

Fields Without Borders / Campos Sin Fronteras \$15.00

Bilingual (Spanish / English) documentary publication which combines personal accounts of farmworkers' experiences in the Carolinas with national and regional data regarding the demographics of farmworkers and changes in agriculture. 60 pages, 22 black & white photographs

Notecards \$12.00

Ten notecards, five of a farmworker family working in the NC cucumber fields and five of a Christmas tree farm in the NC mountains. 4' x 6' black & white notecards & envelopes

Postcards \$10.00

Ten postcards, five of a farmworker and her two children and five of a Mexican Band at the Farmworker Festival. 5' x 7' black & white glossy postcards



ORDER FORM

of Items

_____ x \$45 Insecticide-Free Christmas Tree
 _____ x \$15 Fields Without Borders/Campos Sin Fronteras
 _____ x \$12 Notecards
 _____ x \$10 Postcards

\$ _____ Subtotal
 \$ _____ In North Carolina, pay 6% sales tax (unless a tax-exempt number is included _____)
 \$ _____ Shipping (\$2.75 for orders under \$20; add no shipping for Christmas Trees)
 \$ _____ Total amount due

Name: _____ School/Organization: _____
 Address: _____ City: _____ State: _____ Zip: _____
 Phone: _____ Fax: _____
 Email: _____

Mail or fax this form and a check, money order, or purchase order to:
 Student Action with Farmworkers (SAF), 1317 W. Pettigrew, Durham, NC 27705, 919-681-7600 fax

NOTES FROM THE FIELD



*Photographs by Chris Johnson
December 1997, Creston County, NC*

Resources:

1997 North Carolina Christmas Tree Survey. March 27, 1998. North Carolina Agricultural Statistics. (www.agr.state.nc.us/stats/trees/xmastree.htm).

Cash Receipts-Farm Marketings: Other Field Crops; Vegetables, Fruits, Nuts and Berries; Greenhouse and Nursery. North Carolina Cash Receipts from Farm Marketings, 1995-96. NCDA&CS. (www.agr.state.nc.us/stats/cashrcpt/cshvfygr.htm).

Christmas Tree Facts: Fun Facts and Figures. National Christmas Tree Association (NCTA). (www.christree.org/factnfig/index.html).

Christmas Trees Take on New Life After the Holidays: Environmental Benefits. NCTA. (www.christree.org/environ/index.html).

Giving a gift back to the Environment: Recycling your real Christmas tree. NCTA fact sheet. (www.christree.org).

Interview with Aubrey Raper, Insecticide-Free Christmas Tree Grower. Melinda Steele, by telephone. October 1998.

Interview with Eric Nicholson, Organizer, Pineros y Campesinos Unidos del Noroeste (PCUN). Melinda Steele, by telephone. September 30, 1998.

Sales figures: Fun Facts and Figures. NCTA. (www.christree.org/factnfig/salesfig.html).

Support Oregon Farmworkers Boycott: FLAV-R-PAC, Gardenburger. Leaflet. Pineros y Campesinos Unidos del Noroeste (PCUN).

Tree Farming: Environmental Benefits. NCTA fact sheet. (www.christree.org/environ/farming.html).

Recycling Christmas Trees

- You can use the tree branches and chopped up trunk pieces as mulch for gardens or parks.
- In large numbers, Christmas trees can be used as soil and sand erosion barriers, especially at beaches.
- Christmas trees can be sunk into private fish ponds as refuge and feeding areas for fish.
- You can turn the tree into a bird feeder by adding orange slices and bird seed to the branches.

(All information from the *Christmas Trees Take on New Life After the Holidays* fact sheet)

Christmas Tree Production Endangers Farmworkers

Working on Christmas trees involves long hours of manual labor in cold, wet conditions. Farmworkers plant, prune, apply pesticides and harvest Christmas trees, presenting many dangers to their health. Some of the work on Christmas tree farms is year-round such as pruning and shaping the trees into cone shapes. Although mechanical pruners are sometimes used, farmworkers usually manually prune and shape the trees swinging machetes in a downward motion toward their body. Although the workers wear shin pads, self-inflicted cuts continue to be a problem.

Another dangerous aspect of working on Christmas tree farms is applying pesticides. There are two main methods used to apply pesticides: hand application and aerial spraying. During hand application of pesticides, farmworkers wear a backpack of chemicals and spray the trees by hand while walking through the fields. Aerial spraying is done by a helicopter. Federal worker protections exist which require basic pesticide training and standards for applying pesticides, but they are poorly enforced, and workers have little power to speak up about unnecessarily endangering themselves.

During harvest time, workers cut and ship Christmas trees to prepare them for distribution to consumers. Farmworkers stoop to cut trees with chain saws and then carry them on their shoulders to a central location where they are transported to a packing facility. Stooping, lifting and carrying Christmas trees causes the workers to have back strains. At the packing

facility, crews of workers send trees through a bundler to tie up the branches. Then workers either load the trees individually onto semi-trucks through a conveyer belt or they pack the trees in pallets. The pallets are wooden platforms which can be loaded by a forklift onto the semi-trucks. Once the trees are in the semi-truck, the workers often fumigate them with chemicals.

The dangerous conditions that farmworkers face in the workplace will likely persist until they have power to change their own living and working conditions. Farmworkers need to be able to demand safer working conditions without fear of being fired or demoted. Farmworker advocates can support farmworkers working to improve the safety of their working conditions in many ways. Some ways of doing this include supporting the organizing campaigns of farmworker unions such as Pineros y Campesinos Unidos del Noroeste (PCUN) or Northwest Treeplanters and Farmworkers United. PCUN was founded in 1985 with the mission to organize and support farmworkers in their struggle to negotiate contracts with area growers. Another way to support farmworkers is by being a socially conscious consumer and purchasing Christmas trees which are grown in a sustainable manner or investigating the living and working conditions of farmworkers on farms where your tree is grown.

Interview with *Eric Nicholson, Pineros y Campesinos Unidos del Noroeste (PCUN)*, 300 Young St., Woodburn, OR 97071. (503) 982-0243

Announcements

1999 Into the Fields (ITF) Summer Internships. The Into the Fields program links 30 college students with organizations that work with farmworkers, including: rural health clinics, Migrant Education Programs, immigration and legal assistance organizations, Head Start Centers, occupational safety and health organizations, policy and legislation projects and with community and labor organizing groups. **Applications are due February 12, 1999.** You must be a college student in North or South Carolina or a college student from a farmworker family to participate. For more information, contact Libby Manly at (919) 660-3652.

SAF Awards NC State's First Migrant Scholar with a \$1,250 Scholarship. Alejandra Okie and Mike Seguin, 1994 Into the Fields interns and NC State students raised \$25,000 to endow an annual scholarship for students from farmworker families to attend NC State. Marc Antonio Rodriguez, a junior at NC State and a 1997 SAF Intern, was awarded the first scholarship. On Wednesday, December 2, 1998, SAF will recognize Rodriguez and celebrate the inauguration of the scholarship. The reception will be held at NC State from 7:30-8:30pm. For more information or directions, contact Libby Manly at levante@acpub.duke.edu or (919) 660-3652.

SAF Wish List

Donate your old car to SAF. The car will be used by future Into the Fields Interns who do not have their own transportation to work with farmworkers. If you have a car in good running condition that you would like to donate to SAF, please contact **Melinda Wiggins at (919) 660-3652.**

SAF Needs Frequent Flier Miles. These miles are used to fly students from farmworkers families across the country to NC to participate in the Into the Fields internship program. You must have enough miles for a complete ticket (usually 20,000 to 25,000). **Please contact SAF at (919) 660-3652.**

SAF Thanks Our Donors

Susan Andreatta, Thomas Arcury, Elizabeth Baker, Bryan Bell, Laura Benedict, Thomas and Susan Carson, Matt Case, Catholic Hispanic Center, Rekha Chandrabose, Ann and Robert Corrie, Karen Dixon, Joel Edwards, Eugenia Eng, Alex Harris, Patience Harrison, Nan and Robert Keohane, Carol Lucas, Traci Manly, Sister Evelyn Mattern, Rochelle Wilson Meyer, Julia and Brian O'Grady, Shirley K. Osterhout, Alice Ratliff, Molly Renda, Margaret Sartor, Chris Sims, Claire Stone, Amy Talley, Eugene Thomas, Catherine Wides, Emily and Ed Wilson, Kathy Zaumseil, and the many others who did not wish to be listed.

If you wish to continue receiving *From the Ground Up*, please send your correct mailing address along with a \$15 subscription fee to SAF (address below).

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