Working With People

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The ability to produce healthy, vibrant plants is an art, a science, and a learned skill. Success, however, depends not only on your ability to produce quality plants, but also on your ability to work effectively with people. This chapter provides an overview of skillfully managing relationships with diverse groups of people including staff, clients, and the community (figure 18.1).

Figure 18.1*—Managing a nursery includes working with the community and relating with the public. Friends of Hakalau Forest National Wildlife Refuge raised funds to install this new water tank to support the greenhouse work at the refuge. Volunteers from the Hawai'i Nature Center installed the sign. The greenhouse propagates some of the rarest plants in the world for outplanting on the Refuge. Photo by Dick Wass, Friends of Hakalau Forest National Wildlife Refuge.*

Facing Page: *U.S. Virgin Islands Department of Agriculture nursery on St. Croix. This nursery grows both native tree species and fruit and vegetable plants for urban and community forestry. Photo by Ronald Overton.*

***Figure 18.2**—Regular reconnection with the nursery's vision serves as a guide and a reminder. This "Forest Team" sign reminds everyone the nursery is about more than the trees. Photo by Douglass F. Jacobs.*

Interact Based on the Nursery Vision and Objectives

Nurseries are founded on a vision, as described in Chapter 2, Planning a Tropical Nursery. The vision involves a sense of how the human communities and local ecosystems could be in the future as a result of the efforts put forth by the nursery today and is a key part of relating with other people. Regular attention to the vision can help to motivate staff (including yourself), keep management on track, attract and retain good clients, relate with other growers and researchers, engage with the public, and garner support from the community at large. In daily interactions with staff, clients, and the community, regular reconnection with the vision serves as a guide and a reminder of what needs to be done and why. Keep your nursery's vision, objectives, and mission statement in a visible place and refer to them when working with people (figure 18.2).

Working With Yourself

Personalities and management styles vary widely among effective nursery managers. Some general characteristics, however, are important to good nursery management. A clear understanding of and commitment to the vision are essential along with practical management attributes.

Consider cultivating the following attributes in yourself:

- Keen observation skills.
- A flexible management style (scheduling must be adaptable to the shifting needs of living, growing plants).
- An ability to "think like a plant" (managing plants effectively is an art as well as a science; someone who has a "feel" for the crops will likely do better as a manager than someone who approaches crops strictly from a technical perspective).
- A sense of responsibility for plants in the nursery.
- A creative approach to working with land managers, staff, and other people.
- Enthusiasm for promoting a culture of learning and sharing within the nursery and with the larger community.

A small nursery usually has one person, the manager, who takes care of everything. Even so, it is essential to have at least one backup person who also understands crop status, knows basic things that need to be done, and knows how to do these things. The backup person can keep the nursery running and the plants alive and healthy in case the primary person becomes unavailable. In a larger nursery, the manager oversees the same tasks but delegates many of them to employees. Many individuals contribute their task to the process, but nursery management cannot be conducted "by committee." All nurseries, large or small, ultimately need one person, the manager, to take responsibility for the crop (figure 18.3).

***Figure 18.3**—Keen observation skills and the ability to "think like a plant" are key attributes of an effective nursery manager. Photo by Thomas D. Landis.*

Working With Nursery Staff

As the manager, you should help each employee connect with the nursery's vision. When everyone shares and is knowingly working towards the vision, each day will be a meaningful day, even when filled with tedious tasks such as pulling weeds. Sharing the nursery's mission and overall goals fosters a greater sense of purpose among staff thereby elevating morale and avoiding "it-is-just-a-job" attitudes (figure 18.4).

Staff need to be trained to observe the crops, detect problems, and understand and carry out their direct responsibilities. Some education in horticulture is helpful to enable employees to "think like a plant" and they can be encouraged to stay curious and learn more about the plants and their production. Safety training is essential.

Clear communication is core to great employee relations. Your daily communication with staff will be to assign roles, tasks, and goals. You should encourage dialogue and be open to feedback from employees about how they think they can work more efficiently. You should also provide feedback to staff so they can optimize the value of their work. Brief, weekly meetings are valuable for linking the day-to-day tasks with the nursery's vision. Meetings can be scheduled on Monday morning to assess plans and prioritize activities for the week and again at the end of the week to evaluate progress and identify potential activities for the coming week. Connecting to the vision at the beginning and end of the week sets the tone for current and future work.

***Figure 18.4**—Each person who works at the nursery may choose to state in his or her own words his or her vision for his or her work and how it links to the nursery's mission and objectives. Then, even on days when the task is pulling weeds all day, it is still a meaningful day. Photo by Susan Charnley.*

***Figure 18.5**—It is important to develop an organizational culture within the nursery that facilitates learning and collaborating. Nursery staff in Yap work together to test the irrigation system. Photo by George Hernández.*

Creating a Learning Organization

Learning takes place on an individual level and also within the nursery as an organization. If a nursery is to grow and adapt, it is necessary to develop an organizational culture that facilitates learning and collaboration (figure 18.5).

Adaptive learning within an organization depends on a willingness to accept new information and ideas, to build bridges and make connections among other sources of knowledge, and to occasionally revisit and question fundamental assumptions, even if doing so may mean changing "the way things have always been done." Table 18.1 summarizes some ways that organizations may or may not be set up for adaptive learning. Creating a nursery culture that facilitates, rather than hinders, learning and adaptation is important.

***Table 18.1**—How organizations treat information. Adapted from Westrum (1994).*

Pathological organization	Bureaucratic organization	Learning organization
Do not want to know	May not find out	Actively seek information
Messengers are shot	Messengers are listened to	Messengers are trained
Responsibility is shirked	Responsibility is compartmentalized	Responsibility is shared
Bridging is discouraged	Bridging is allowed but neglected	Bridging is rewarded
Failure is punished or covered up	Organization is just and merciful	Inquiry and redirection
New ideas are crushed	New ideas present problems	New ideas are welcomed

Discovering

Daily observation and recordkeeping, maintaining plant development records, and updating propagation protocols are the foundation for understanding how crops grow and develop in your nursery environment. Making discoveries through simple experimentation is often a key aspect of successful nursery management. Monthly or seasonal staff meetings are useful for determine some of the most pressing questions facing the nursery. These questions will shape priorities for trials. For example, at the beginning stages of nursery development when production levels are low, the nursery may decide to try different container types to determine the best ones for the crops to be grown at the nursery, or to experiment with different seed treatment techniques for a new species. Later in nursery development, other pressing questions may arise such as: What problems are recurring that might be preventable? What could improve efficiency? What could improve crop quality? The nursery might decide to test seed sources and assess their performance in the nursery and the field to refine target plant objectives. Ways to design, execute, and assess these experiments are detailed in Chapter 20, Discovering Ways to Improve Nursery Practices and Plant Quality.

Training

Training and ongoing education is of great value to you and your staff. The more that everyone understands his or her work and the effects of his or her activities, the more he or she will be able to relate to the crop and improve plant quality and nursery efficiency. Attending training sessions and conferences and reading pertinent publications are important investments in the nursery's adaptability and growth (figure 18.6). Visiting other nurseries and reciprocating by hosting other growers at your nursery is an important part of cultivating supportive, informative, sharing relationships (figure 18.7) and are a wonderful opportunity to gain a broader perspective.

Working With Clients

Nurseries take many different forms: retail, wholesale, research, nonprofit, community-based, or some combination thereof. Clients may be farmers, forest planters, conservation area managers, schools, landscapers, nonprofit organizations, gardeners, or government agencies. With increasing awareness of the importance of quality plants well-matched for conditions on the outplanting site, more clients seek nurseries that can provide those kinds of plants. Working with clients involves understanding their target plant needs, contracting, ongoing communications, and following-up after outplanting to see how the plants performed in the field.

Defining Target Plant Needs

As discussed in Chapter 3, Defining the Target Plant, nursery managers and land managers ideally engage in an ongoing discussion about project objectives, reevaluate successes and failures observed on the outplanting site, and subsequently redefine the target plant to improve future plant quality in the nursery and on the outplanting site.

***Figure 18.6**—Training and ongoing education is of great value to you and your staff. Here, nursery workers gathered for a training to learn about grafting techniques in Volcanoes National Park, on the Big Island of Hawai'i. Photo by Kim M. Wilkinson.*

***Figure 18.7**—Hosting visits to your nursery and attending events at other nurseries is a great way to cultivate information exchange and supportive relationships. Photo by Kim M. Wilkinson.*

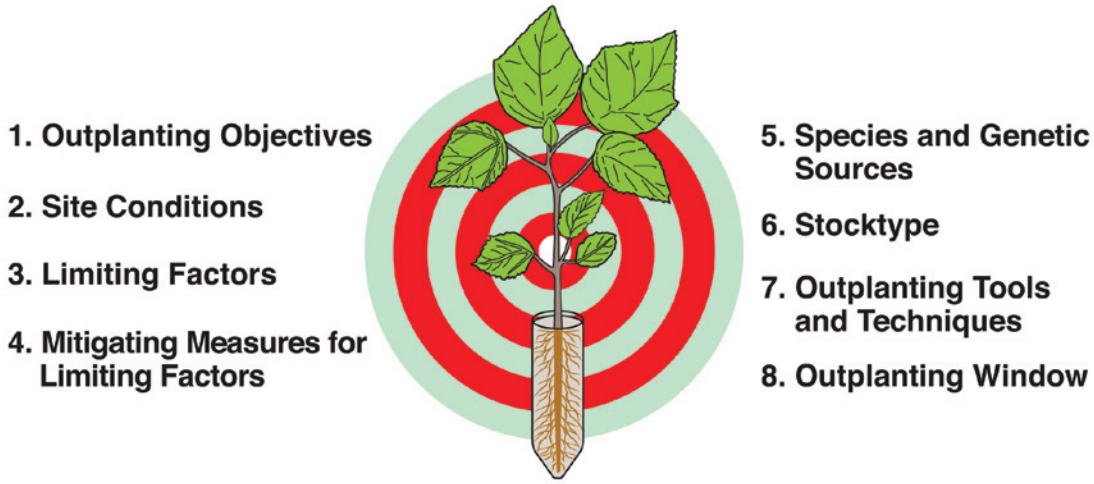

Figure 18.8*—The process of defining target plant materials is an essential tool for specifying what the nursery will grow for the client. Illustration adapted from Landis (2011) by Jim Marin.*

For new nurseries, clients, or projects, a good starting point for the Target Plant Concept dialog is to consider past experiences on similar sites and determine the target plant needs for the project. For complex, large, or specialized projects, another professional may need to assess the site and create a plan including appropriate species selection, spacing, and other target plant needs. Examples include government-supported projects that warrant a Forest Stewardship Plan, a Conservation Plan (such as the USDA Natural Resources Conservation Service might do for soil conservation or riparian restoration), a Habitat Improvement Plan, or commercial Farm Plans. If a new client might require this level of assistance, steer the client to the appropriate agency or professional and invite him or her to order from you when his or her plan is ready and the target plant material requirements are defined. Sometimes, agencies may have general plant recommendations, such as appropriate windbreak species, requiring you and the client to fill in the remaining "blanks" for the target plant, or sometimes you and the client may simply need to determine outplanting window and local genetics. The example from Chapter 4, Crop Planning: Propagation Protocols, Schedules, and Records, of a client and nursery working together is revisited here (see textbox) with more emphasis on how the communication process works.

Working With Noncontracted Clients

Nurseries that grow on contract may also grow additional seedlings or have overstock to sell to potential customers that need plants immediately. If the seedlings are genetically appropriate for their site, these customers may wish to purchase them for their project. A potential customer occasionally may have the notion that your nursery can provide "cheap, all-purpose, ready-made, grow-anywhere plants"—we know that does not exist. In this circumstance, it is your job to help them learn; by requiring the target plant information you are supporting the success of their project, which reflects favorably on your nursery. Not everyone can be your client, and that is okay. If you are having trouble getting a potential client to think through his or her project and define his or her target plant needs, be friendly but firm and give the client a way to come back: "Our nursery takes pride in providing high-quality plant materials suitable for client's needs. I would be happy to help you with your plants after you have determined your target plant needs for your outplanting site."

Working With Contracted Clients

Communication about plant targets is easier when clients order plants on contract. Many nurseries grow most of their native and traditional plants to order on contract, which ensures that plants are matched to specific project objectives and outplanting sites. This approach is the opposite of speculative growing, where nurseries produce plants based on estimates of future demand. Contract growing involves producing plants to a client's target specifications (figures 18.8, 18.9). The ecological and economic benefits of this approach are plentiful—clients benefit by getting exactly the plants they need when they need them, nurseries benefit by minimizing waste and maximizing time and resources propagating only plants that will be used, and plants and the environment benefit from greater success in survival, growth, and establishment of locally appropriate species. For conservation work and habitat improvement, growing locally adapted, genetically appropriate plant materials on

An Example of Working With a Contracted Client

Recall from Chapter 4, Crop Planning: Propagation Protocols, Schedules, and Records, that… *In March, a retired cattle rancher on the Big Island of Hawai'i called your nursery. She desires to plant 500 koa (*Acacia koa*) trees inside a fenced area of former cattle pasture as a legacy grove for her grandchildren. Her site, at 2,000 ft elevation on the leeward side of the island, has been in pasture for more than a century. She wants to use a dibble to plant trees during the November to February rainy season. Because her family will help during their Christmas holiday, the ideal delivery date is December 15. Before planting, she will remove the grass.*

Based on this information, you begin a conversation with the client to discuss the criteria necessary to define the target koa seedlings for her site. This conversation requires you to carefully listen to what the client needs and wants, and, equally important, to offer your expertise and recommendations on what is realistically possible. The client may not know much about genetics, so you share the importance of local adaptation and where to find information about appropriate sources for her trees. How the koa will benefit from rhizobia and mycorrhizal inoculation may also be new information for the client. The optimal outplanting time may be the start of the rainy season in November, but if she does not have the family labor she needs, the timing will have to be scheduled for 1 month later. Large seedlings might be ideal for this project because of the competing grass issue, but because of the client's budget and time constraints, you will need to discuss smaller stocktype options. She may have initially planned to outplant with a dibble, but after a discussion about how these tools can cause compaction and restrict roots, she decides to use a pick and shovel instead. After all eight aspects of the target plant are defined, you are both clear about what kinds of plants would best meet the outplanting objectives and are ready to create a contract that clarifies expectations and prevents any surprises at plant delivery time.

contract helps maximize benefits to pollinators and other wildlife. When ordering plants on contract, clients need to give the nursery sufficient time to produce them to specification for outplanting at the correct time.

If the client is a family or an organization with several members, ask the client to assign one sole contact person for the order with the nursery. This person should be your contact from the time of drafting and signing the contract through to delivery of the plants. In turn, the nursery should

Figure 18.9*—The nursery manager and the land manager meet at the outplanting site to define target plant specifications for the project. Photo by Brian F. Daley.*

have only one contact person for that client. This one-on-one arrangement precludes many potential misunderstandings, streamlines time and energy spent on communication, and helps develop long-term relationships and trust. For contract growing, create a clear agreement in writing. In some circumstances, such as growing for neighbors or close community members, a written agreement may seem overly formal; however, it can be invaluable for creating clear expectations, enhancing communication, demonstrating your professionalism, and making the entire process a smooth one for everyone concerned. Often your client will be new to purchasing plants by contract and will be relieved you have a protocol in place to ensure everything goes smoothly, and the client's investment is protected. Both the client and the nursery representatives need to sign the agreement, and each need to keep a signed copy.

The terms of the agreement must include the following—

- Description of the plant materials to be provided (such as species, genetics, container type, plant size).
- Anticipated schedule.
- Quantity of plants to be provided.
- Price per unit and the total price for the order.
- Any additional fees that may apply, such as delivery charges and refundable container deposits.
- When and how payment will be made.

Crop production may vary from year to year. If possible, when the order is placed, agree on a window of time for plant delivery that spans a few weeks rather than setting an exact date. Based on crop development, the exact date for delivery can be determined closer to the tentative delivery date.

The sample contract in the textbox below is for demonstration purposes only. Contracts at your nursery should be tailored to meet your and your client's needs. It is best to consult with a legal expert to ensure the contract protects your nursery and conforms to local legal statutes.

Ongoing Communications With Clients

Clients appreciate staying informed about their crop's progress. Sending e-mail updates (including digital photos), having periodic phone conversations, or inviting clients to visit their crop at the nursery is vital to keeping them involved and committed to the schedule (figure 18.10).

Sample Contract With Green's Tree Nursery

This agreement, entered into this 7th (day) of March (month), 2014 (year), by and between **Green's Tree Nursery** and Upland Ranch and Forest (hereinafter referred to as "Client") witnesses as follows:

Whereas Green's Tree Nursery is organized to provide plant materials for outplanting; whereas Client is interested in purchasing plant materials from Green's Tree Nursery, it is agreed between the parties as follows:

I. Plant Materials Provided by Green's Tree Nursery

In time for the planting window December 10–20 Green's Tree Nursery will provide 500 koa (*Acacia koa*) seedlings of the following specifications:

- Species—koa (*Acacia koa*).
- Genetic source—Seeds sourced from minimum 50 parent trees of good form (large, straight-boled) from koa forest neighboring Upland Ranch.
- Size and description—Containers: Ray Leach "Stubby" cells; Seedling size: 15 to 30 cm tall, minimum stem diameter 3.5 mm; Roots: firm and nodulating with rhizobia, inoculated with mycorrhizal fungi (AMF).
- Price—$3.50 per seedling.

II. Fees

Client agrees to pay Green's Tree Nursery $1,750 for the 500 plants listed above. Payment shall be made in the following way: an initial fee of $875 (50% of the total for plant materials) is required to begin propagation, with the balance of $875 to be paid before dispatch of the plant materials. Other fees, such as container deposits (10 cents per "Stubby" cell) and shipping/delivery charges (TBD based on carrier) if applicable, will be billed separately and are also to be paid in full before dispatch of the plant materials.

If any payment as per the above schedule remains overdue for more than 60 days, Client acknowledges that Green's Tree Nursery may take legal action to collect the overdue amount. In such event, Client will be responsible for all reasonable litigation expenses incurred by Green's Tree Nursery, including, but not limited to, court costs and attorney fees.

III. General Conditions

Green's Tree Nursery agrees to use its best efforts to provide the plant materials listed in Section I above.

Client understands and acknowledges that Green's Tree Nursery shall in no way bear liability for results produced in use of plant materials. Green's Tree Nursery's maximum liability is limited in amount to the amount paid by Client to Green's Tree Nursery for the purchase of the plant materials under all circumstances and regardless of the nature, cause, or extent of any loss.

In the event that Client cancels the order for plant materials in whole or in part, Client agrees to pay the balance due for the full amount for plant materials as listed in Section I.

Green's Tree Nursery reserves the right to prorate or cancel any order, in whole or in part, because of natural disaster, disease, casualty, or other circumstances beyond our control. In the event that Green's Tree Nursery is unable to provide the plant materials listed in Section I above by December 20, the initial fee paid by Client may be applied to another purchase, credited to a future order, or refunded, as requested by Client. In any other event, the initial fee is nonrefundable and the entire balance is due.

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Client agrees that all plant materials ordered must be dispatched (picked up, shipped, or delivered) within 30 days of notification of readiness as determined by Green's Tree Nursery. Plant materials not dispatched within 30 days are subject to a storage fee of $0.05 cents per plant per day; plant materials not claimed within 45 days of notification of readiness are forfeited.

IV. Conclusion

This agreement, executed in duplicate, sets forth the entire contract between the parties and may be canceled, modified, or amended only by a written instrument executed by each of the parties thereto.

This agreement shall be construed as a contract under the laws of Hawai'i (name of State or territory and country).

Witness the hands and seals of the parties hereto, each duly authorized, the day and year first written above.

_____

Maria Planter — Date
Upland Ranch and Forest

_____

Gloria Green — Date
Green's Tree Nursery

***Figure 18.10**—Clients often enjoy staying informed about their crop's progress. Sending e-mail updates with photos or inviting clients to visit their crop helps keep clients in the loop. Photo by Douglass F. Jacobs.*

Sample Client Update

Re: Update on your order for 500 koa (Acacia koa)

Date: November 10

Dear Maria,

I hope this note finds you well. I'm writing to let you know your 500 koa seedlings are doing great—we moved them into the final hardening stage of production last week, so they are getting toughened up for outplanting. We are right on schedule. Let's arrange a pickup date for some time between December 10 and December 15. I think you said you have a van to transport them? If not, let me know, and we will find a safe transport solution. Please write or call back to confirm that you got this message, when you get a chance. I look forward to hearing from you.

—Gloria, Manager, Green's Tree Nursery

Staff should remember that tremendous effort and expense go into planning a project and preparing land for outplanting. Acquiring plants is a central part of this process but may be a small percentage of the total project cost. Nursery staff should do everything in their power to meet set schedules. If any problems or delays are anticipated with the crop, clients must be updated immediately so they can modify their plans accordingly.

Educating Clients About Shipping, Handling, and Outplanting

As described in Chapter 16, Harvesting and Shipping, plants are vulnerable to damaging stresses during the transition from the nursery to the outplanting site. Some nurseries take charge of shipping and handling, others leave it to the client to pick up and transport their plants. In most cases, clients will do their own outplanting. Many clients will be knowledgeable about plants and treat them properly to ensure success after leaving the nursery. Other clients, however, may compromise their plants' quality by stressing them during transport, delaying planting by weeks without watering, or planting improperly. Everyone loses when these problems occur: the client is unhappy (and may blame the nursery), the nursery's hard work to cultivate the plants is wasted, the plants do not survive or thrive, and the environment does not benefit from the presence of the plants. These problems can be avoided by educating clients in advance so they know how to properly transport, store, and outplant their new plants (figure 18.11).

Well before the delivery date for plants, provide clients with information to help them properly plan for the best shipping, handling, storage, and outplanting practices after they receive their plants. For example, you could send them copies of Chapter 16, Harvesting and Shipping, and Chapter 17, Outplanting, from this manual, or you could create a checklist of "do's" and "don'ts" based on those chapters and your own experiences. These educational materials will also help clients communicate best practices to everyone who will work with the plants after they leave the nursery.

Following Up With Clients

The success of the nursery, the clients, and the plants in the field are interrelated. After an order is complete, you need to have a system in place whereby clients can provide feedback. Sometimes nursery managers are reluctant to follow up because they are concerned that they will be blamed for losses or problems. With a good contract in place (as described previously), however, the limits of the nursery's responsibility are clearly defined.

Often, success of reforestation and restoration projects is monitored after outplanting by tracking survival or other important characteristics, as described in Chapter 17, Outplanting. Clients may also keep track of specific problems affecting plant survival and growth in the field (pests, grazing animals, drought, and so on). This information, whether formal or observational, should be shared with the nursery.

Figure 18.11—*Educate clients in advance so they know how to properly transport, store, and outplant their new plants. Photo by Brian F. Daley.*

***Figure 18.12**—Hosting workshops or field days helps educate the community about the nursery's mission and plant materials being produced, such as this group of university students learning about reforesting Hawaiian dryland native species. Photo by Yvonne Yarber Carter.*

***Figure 18.13**—Discussing the role of native plants in the local forest ecology is an engaging way to involve youth groups. Shown are members of the St. Croix, Virgin Islands 4-H club hiking on a trail that leads to a forest restoration site where native trees were planted. Photo by Brian F. Daley.*

This field information is important for learning and improving nursery practices and is a key part of customer relations. Although some failures and problems are inevitable, you will also get an opportunity to see successes, which will add to your satisfaction with your work. Ideally the nursery contact person can visit the outplanting site and check on the progress of the plants over time. Observations can then be used to improve target plant specifications for that outplanting environment.

Working With the Community

Community education and outreach are important activities for many tropical plant nurseries. The perpetuation of native and culturally important plants is often a part of the nursery's mission, but the best efforts are lost if the community is not ready, willing, or able to use plants the nursery will produce. Hosting tours, workshops, or field days, writing educational materials, articles, or blogs, and attending local fairs, farmer's markets, or trade shows can all help educate the community about the nursery's mission and availability of plant materials being produced. People who might one day plant species from your nursery would benefit from learning interesting details about the plants, such as their interactions with pollinators or their traditional medicinal properties, as well as some of the more practical aspects of working with the plants, such as how to plant a tree or the importance of locally adapted seed sources (figure 18.12).

***Figure 18.14**—Sharing knowledge of local plants and their uses with future generations is a goal shared by many native plant nurseries. Photo by Thomas D. Landis.*

Many tropical plant nurseries work with school groups and environmental or cultural education activities, such as ecohikes and forest restoration site visits (figure 18.13). Connecting with living, growing plants can be a wonderful activity for both youth and adults and a meaningful way to pass traditional and scientific knowledge about plant species, especially their uses and benefits, to younger generations (figure 18.14). These activities can also increase the community's desire to plant and care for plants from the nursery.

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