HISTORY OF THE MONTEVERDE INSTITUTE (2-2026)

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The Monteverde Institute (MVI), a non-profit educational organization, was founded in 1986 in the mountainous northwestern Costa Rican community of Monteverde. In partnership with universities and schools primarily from the United States, MVI has provided courses for thousands of students in: tropical and conservation biology, conservation, sustainability, agroecology, permaculture and organic gardening, community public health, globalization, ecotourism, social justice, architecture and landscape architecture, sustainable development planning, education, journalism, and Spanish language and Costa Rican culture. MVI has put sustainability and conservation into practice on its campus and through its actions. The Institute also has promoted and facilitated research and service learning as it increased community engagement, and it has offered many community programs that benefit the local area and promote sustainable development (for a more detailed history, see Wilkins 2011, Hamilton 2019, Perkins 2021, MVI Annual Reports).

Origins and Development

According to the late John Trostle (1925-2015), one of the founders of MVI, the Institute's oldest roots lay in biology classes at the Friend's School from the 1950s, a growing "love of nature" among those Quaker families who welcomed biological researchers, and the visits of graduate tropical biology courses run by the Organization for Tropical Studies (OTS) (Trostle 1990-91; Burlingame 2002). Starting in the late 1960s, a growing number of biologists conducted extensive research on aspects of the area's high biodiversity and became increasingly concerned about conserving that biodiversity.

One Monteverde researcher, Nalini Nadkarni, who had taken an OTS course that introduced her to Monteverde and who was teaching at the University of California, Santa Barbara, was interested in bringing an undergraduate course and team teaching it with her husband, biologist Jack Longino. They talked with John Trostle, who had spent twenty years as Associate Director of the Council on International Educational Exchange (CIEE, then based in New York) before retiring to Monteverde. He

had worked with the faculty (Bill Allaway and Henry Weaver) in charge of the University of California Education Abroad Program (UCEAP); in 1986, UCEAP asked for courses in tropical biology and agroecology. Trostle, Nadkarni, Longino, and Barbara Haber became involved in discussions with Monteverde residents, some of whom were concerned about the possible negative impacts of a group of US undergraduates living and studying in the community. Trostle said "the community had begun to realize that while tourism cannot be controlled, it is sometimes possible to guide components of it in creative educational ways. We might guide college groups into longer term high-quality educational programs, and by so doing, develop new jobs and careers for area residents, as well as create educational and cultural activities for the zone" (Trostle 1990-91).

In 1986, twenty-eight residents of Monteverde, most originally from the US, founded the non-profit "Asociación Instituto de Monteverde" in accordance with the Costa Rican Law of Associations of 1939. That law and subsequent revisions required certain administrative structures and legal reporting mechanisms that continue to shape MVI. The organization must have a Constitution and By-Laws and a General Assembly that meets regularly once a year; the 28 founders formed the original Assembly. Additional members have been elected. The Assembly elects a Board, consisting of a President, Vice-President, Secretary, and Treasurer, one or more Members-at-Large (Vocals), and sometimes an Alternate (Suplente). The Board in turn selects the Executive Director who hires and manages the rest of the staff. Minutes (Actas) of the Assembly and Board meetings must be entered (in Spanish) in special legal books and in the National Registry. An additional elected official, a Fiscal, is a kind of overseer responsible for certifying that the Assembly and the Board have carried out all their legal responsibilities and have followed the organization's constitution, bylaws, and mission.

The founders drew up a constitution listing the aims of MVI which included: "A) promote education, culture, and scientific investigation in the areas of biology and agriculture; B) organize musical and dramatic presentations, as well as congresses, symposia, conferences, courses, and talks, on cultural, educational, or scientific themes" (Constitution of the Monteverde Institute 1986). MVI began to expand its focus in 1990, first developing a Mission statement that reflected Quaker values: "The Monteverde Institute is a non-profit association dedicated to peace, justice, knowledge, and the vision of a sustainable future...." In 1993, as the Monteverde area experienced rapid social, economic, and demographic change due to the growth of tourism and as global concerns shifted to “Sustainable development,” MVI broadened its objectives to stress “Education for a Sustainable Future” (Bylaws 1993).

As MVI approached its 20th Anniversary, the Board and other MVI supporters became concerned about the scope of the mission, a growing financial debt burden from the construction of its new building and library addition, and from land acquisition. Debt went up while income from courses decreased, due partly to the impact of the 9/11 attacks; the Iraqi war; and increased competition from other study abroad

programs. Beginning in 2006, MVI's Director, working closely with the Board, instituted drastic reductions in expenses through major personnel cuts, sale or divestment of some properties, and expanded efforts to increase income and find new partnerships for offering courses on a regular basis. The leaner, more focused MVI paid off its debts by 2008 and successfully began expansion of its financial base (with more courses and students) and extension of its community outreach (see MVI Assembly Reports since 2005). A much stronger MVI celebrated its 25th Anniversary in 2011, offering a vision of "a sustainable community for a sustainable world." MVI emphasized a mission "to advance sustainable living at the local and global level through place-based education, applied research, and collaborative community programs." For the 30th Anniversary (2016), MVI's staff organized displays and activities to familiarize Assembly members with all the Institute's programs and campus infrastructure developments.

MVI Director Nat Scrimshaw helped establish the Alliance for the Monteverde Institute (AMVI) in 1993 in Vermont to promote and support the Institute and other Monteverde organizations. In 1994, the IRS approved AMVI as a US 501(c)3 non-profit organization that could receive tax-deductible contributions. The organization became dormant in 2005, but interest from a new Director and friends of MVI led to AMVI's reactivation in 2009. One of AMVI's Board members, Bob Howe, started an illustrated electronic Newsletter with information about the latest developments at MVI. Newsletters were sent regularly to Alumni and supporters in the database Howe created. MVI has taken the lead since the early 2020s in producing the Newsletters (now digital) and updating the database; MVI's Director regularly participates in AMVI's monthly Zoom meetings.

Academic Programs

Monteverde and the areas around it offer students opportunities to learn from famously biodiverse environments and from vibrant communities that have undergone recent socio-economic and cultural changes, all contributing to the richness of place-based educational experiences (see Nadkarni and Wheelwright 2000, L. Guindon, et al. 2001, Witt and Dowell 2021, Burlingame 2000 and 2024). MVI provided more than 650 courses (long and short) for nearly 11,600 students from its founding to the end of 2019, the last full year before COVID (E. Coghi, pers. comm.). Courses have included semester/quarter programs for US undergraduate and graduate credit; shorter university level courses for students and for faculty from Costa Rica, the US Canada, and Europe on a wide variety of topics; and shorter programs for high schools, conservation groups, and service-based groups. In 2018, long courses made up 69% of total student days (Assembly Reports 2018). “Each of the 473 students that participated in the academic programs in 2018 worked in either a research or community program, and many participated in both” (Hamilton 2019). The variety of course topics, institutions, and numbers of students coming for courses can be traced through annual course calendar spread sheets (Calendario de cursos) and Annual Reports. Course participants in longer courses generally also receive instruction in Spanish and

Costa Rican culture. Internships for college credit or general professional experience have been available for many years. MVI has collaborated with partner institutions to offer customized services ranging from providing all instruction by its well-trained faculty, field trips, logistics, housing, and meals to fewer comprehensive arrangements.

The first Nadkarni/Longino quarter-long University of California Education Abroad Program (UCEAP) began at MVI in 1987. Since 1992, two quarter-long UCEAP programs have been offered every year. Tropical biology remains the central focus of the program, coordinated for more than twenty-five years by resident biologist Frank Joyce. By 1995, Joyce made conservation biology (theories and practices) an essential part of the program to reflect the growing international importance of this new field (F. Joyce, pers. comm.); the name of the course was changed to Tropical Biology and Conservation. Courses in Tropical Diversity and Tropical Community Ecology given by Joyce, MVI faculty, and resident or visiting researchers include many field projects, which take place primarily in the Monteverde Zone but include field trips to different ecosystems in the country. A third course, taught by local biologists and farmers introduces students to agroecology, tropical farming, land-use practices, sustainable agriculture, conservation practices, and, more recently, ecotourism. A course in Spanish (for biologists) and local culture, taught by degreed faculty and local native Spanish-speaking instructors, and homestays with local Costa Rican families are included in the program. The final course is an independent study project based on fieldwork. At the completion of this project, each student makes an oral presentation in a widely publicized symposium at MVI that is open to the community, with simultaneous interpretation into Spanish. UCEAP's format is used for other semester/quarter long biology programs that receive college credit in the US. It has also been adapted for many customized shorter courses at MVI (generally 1-3 weeks).

In keeping with its broader mission, MVI launched a 9–10-week intensive summer course, Sustainable Futures, in 1993 for upper-level undergraduate and graduate students in architecture, landscape architecture and planning with SUNY-Buffalo and the University of Maryland (subsequently joined by other partner universities). For more than 30 years, students have developed their knowledge and skills through “service learning” as they work (gratis) on planning and designing projects proposed by local communities and institutions (see Community Programs section below). SF programs have also provided designs for MVI's main building and additions, outdoor classrooms, and campus landscaping.

Other links to MVI's mission and provision of benefits to local communities have come from several additional "long" courses. From 2001 to 2015, a partnership between MVI and the University of South Florida produced a program called Globalization and Community Health Field School (course title and duration have varied). Students were trained in quantitative and qualitative research techniques, experimental design, and data analysis as they studied a number of health related issues in the

Monteverde area, including: women and adolescent access to healthcare from prenatal through birth services; sexually transmitted diseases; tobacco use in adolescents; occupational dangers for agricultural workers; obesity, nutrition and food security; and access to clean water and dangers from untreated grey and black water (see MVI' s Annual Reports).

A spring semester-long interdisciplinary place-based program for undergraduates, Globalization, Development, and the Environment (course title varied) began in Spring 2009 as a joint program between Goucher and Mount Holyoke Colleges. The program focused on the rapid changes in the Monteverde area, where tourism was replacing traditional agriculture, to understand the broader complexity of globalization and changing threats to sustainability in Costa Rica and beyond. Students spent most of their time studying and doing applied research in the Monteverde area where they lived with local families. They had to complete an independent research project and present their findings publicly at the end of the semester. Program participants were very enthusiastic about their experiences ("My semester in Monteverde changed my life and I'll never forget it or any of the people I shared it with. ... I'd recommend this program for anyone who values community, loves hands-on-learning, and cares about the world we live in"); several students stayed on as volunteers or interns (www.mtholyoke.edu/ global/study_abroad/mhc-costarica; see also MVI YouTube channel, June 1, 2015).

2017 saw the beginning of a long summer program with DukeEngage, a special program started at Duke University in 2007 that enlisted thousands of students in community engagement or service learning all over the world. Students were fully funded by grants from the Duke Endowment and the Bill and Melinda Gates Foundation. The Monteverde program focused on "habitat and water resource restoration in the Bellbird Biological Corridor" [see below] (https://dukeengage.duke.edu/wp-content/uploads/2017/02/costa-rica-2017).

A graph of the "History of Courses-MVI- 1988-2016" shows a dramatic growth in the number of students in the first six years as UCEAP added a second semester in 1992 (2016 Annual Report). The two UCEAP courses per year continue to have the largest number of students; they draw students from all the University of California campuses. The Council on International Educational Exchange (CIEE) began offering a summer quarter through MVI in 1989 and added two semester programs in 1996 (A. Masters, K. Masters, pers. comm.). CIEE separated from MVI in 1999 and became an independent program in Monteverde. Some other long courses are no longer offered; since 1999, there have been more short courses and fewer total numbers of student days. Most years had a mixture of longer and shorter courses averaging 20 to 25 courses per year. Many courses are shorter than a semester or even than a month and focus on a wide variety of topics including field biology and tropical ecology, climate change, community engagement in sustainable development, community health, service learning, writing about nature, and Spanish language and Costa Rican culture (see listings in MVI Calendario Cursos and Annual Reports).

International events produced decreases in the number of courses and students. In addition to the impact of 9/11 and the Iraqi war previously noted, the worldwide financial crisis that started in 2007/2008 had a significant impact on student numbers. Hard recruiting work and improvements at MVI plus positive global economic and political developments produced dramatic increases in the number of courses and students starting in 2010. Also, as drug related violence increased in Mexico, more international students chose peaceful Costa Rica, which became the Latin American country of choice for US study abroad students. There was some decrease in the number of students in 2015-16 because of fear of the Zika virus, but an increase in 2018, partly because political turmoil in Nicaragua made it less appealing. During calendar year 2018, there were 33 courses, a total student enrollment (441) almost twice that of 2007, and more student course days (more students in long courses staying more days); in 2019, there were 36 courses (5 of which were long ones) with a total of 539 students (MVI Calendario de cursos through 2019; Institute of International Education 2014). In March 2020, when the Costa Rican government closed the borders and shut down everything in the face of COVID, the Goucher/Mount Holyoke semester students were the only ones at MVI; MVI promptly sent them back to the US, and they completed their semester virtually. MVI had no more courses on campus for 11 months; this was an existential threat since most of MVI's income came from courses and academic programs (F. Perkins, 2021). Staff at MVI pivoted to work on saving the Institute and helping the community survive (see details in Community Programs below).

The Institute was able to survive because the Board had wisely set aside Reserve funds for an emergency. MVI made limited personnel cuts and reduced schedules; remaining personnel worked 75% of their normal schedule (and received the corresponding salary) and did all they could to reduce expenditures (Perkins 2021). They successfully applied for major grants and received increased donations from the US through AMVI, including from a Go-Fund-Me campaign for the Planting Sustainability Program. In addition, they started marketing virtual Spanish and other courses as well as virtual internships. The US Colleges and Universities that had previously served as partners for MVI courses were concerned about liability if they sent students abroad, and they were giving courses on their own campuses virtually or in mixed format. These partners were slow to return to MVI, so in 2021, the Institute welcomed younger students (all of whom had to follow strict COVID safety protocols) from organizations that ran Gap year, summer, service learning, and volunteer programs (see MVI Calendario Cursos 2021). G Adventures groups were also an important source of income as conventional tourism restarted before academic tourism (F. Perkins, pers. comm.). The first of the onsite university programs (Trinity University) arrived for a month in late May 2021 to focus on field research and conservation; UCEAP returned for their Fall semester program in October, having skipped their traditional Spring semester, which they returned to in March 2022. By May, the two-month Sustainable Futures Program

(SF) returned along with several university programs, some of them for a month or more, including Michigan Tech's Conservation and Sustainability in Monteverde. Finally, in 2023, more university programs returned to MVI, new schools came, and some programs for younger students continued; there were 45 courses/programs with a total of 634 students, producing the highest number of course days since before the COVID shutdown. In 2024, 37 courses (9 were long/medium) included 496 students, but more students stayed for longer times. In 2025, there were fewer courses (34), including 10 long/medium with a total of 463 students, producing cumulative totals since 1987 of more than 860 courses/programs and nearly 14,500 students. The historical trends show fewer long/medium length courses/ programs, and more short courses, but an increasing diversity of long/medium courses. In 2025, for example, there were 9 courses focused on Sustainability, 4 on Health, 4 on Tropical Ecology, 3 on Conservation, 2 each on: Agriculture, Art, and Spanish and Culture. There were also 7 courses each focused on a different area, such as Tourism, Biology and Geology, Architecture, Land Use Management, Water Resources Management, and one on Ecology, Spanish, and Statistics (A. Paniagua, pers. comm.; see MVI Calendario Cursos since 2020 and MVI Annual Reports, where the Academic Program report provides details on the institutions bringing students, the courses, and graphs showing changes in numbers of courses, students, and course-days since 2011).

Most academic programs include Spanish classes; since Spanish language abilities can vary greatly, there are frequently several sections per group. In 2024, MVI hired a full-time Coordinator to develop the Spanish program; she has also contributed to community programs, which are discussed in that section, below. During COVID, MVI had started offering private virtual Spanish lessons; virtual and in-person private lessons continued in the post-COVID period. In 2024, the program taught Spanish as a second language to 137 students in 7 MVI courses, 122 students in private lessons (in person and virtual), and 8 interns for a total of 267 students (Annual Report 2024). 2025 saw more students (159) from more academic groups (10), but fewer students in private lessons (47, including 6 interns, and 5 virtual students), for a total of 206 and nearly 840 total class hours. Spanish classes for groups were "complemented by 12 cooking classes, which strengthened the cultural and experiential component of the program, contributing to a holistic approach to language learning" (K. Rojas, pers. comm). Rojas stresses that "the program's approach integrating language, culture, and community is a distinctive feature."

The Spanish only students are not included in the above course totals, nor are the growing number of groups visiting less than one day (164 groups in 2023), mostly annual National Geographic/G Adventures tour groups of about 15 people. These visitors spend part of a day at MVI, learning about reforestation and helping with reforestation preparations at MVI's tree nursery. Paused during COVID, Nat Geo brought an increasing number of visitors, for a record 1789 in 2024 and even more in 2025 (1908) (see MVI Calendario Cursos 2018-2024; MVI Annual Reports). To diversify available activities,

in 2024, "some Nat Geo groups participated in epiphyte phenology research or ProNativas native landscaping" (F. Perkins, pers. comm.). MVI also benefits financially from the Nat Geo visits, so these are win-win interactions.

MVI had reestablished financial stability by 2023. The Alliance for the Monteverde Institute (AMVI) turned over responsibilities for all donations to the larger US non-profit Amigos of Costa Rica (amigosofcostarica.org) in 2023; it could accept tax-deductible donations in the U.S. and make grants to its affiliates in Costa Rica. Amigos receives donations for more than 100 non-profit organizations in Costa Rica, including several others in Monteverde; in 2023, all donations to Amigos totaled $6.5 million; in 2024, that total rose to $11.6 million (Amigos of Costa Rica, 2024 Annual Report). AMVI became an advisory and fundraising board that also recruits volunteer Allies to help MVI with specific projects. It still meets monthly with MVI's Director. 2024 was the first year since COVID that MVI achieved a financial surplus by the end of the year despite the unfavorable exchange rate; this positive outcome was the result of both careful control of expenses and increased income from several sources (detailed in 2024 Annual Report).

The Executive Director and Academic Director have increasingly been involved in recruiting new groups to come to MVI, stressing that "our academic programs are unique thanks to their interface with MVI's community relationships, on-going projects, and research" (monteverde-institute.org/Academics). They have visited US college and university campuses and have developed extensive online information about course/program options, sample itineraries, many available Interactive talks and workshops/activities (at $200-$500 each), homestays, and internships (monteverde-institute.org/ Academics/Teach with us). In 2025, for the first time, 3 Canadian universities had programs at MVI (A. Paniagua, pers. comm.).

For many years, internships and volunteer activities grew out of students' academic experiences at MVI. They wanted to stay after their courses ended to do research or be involved in a service project on MVI's campus or in surrounding communities. In 2012, MVI worked with Lake Forest College to create an annual long-course hybrid of supervised internships and Costa Rican cultural immersion for four undergraduates and a few new graduates (F. Perkins, pers. comm.; Gora 2013). Many US students are now looking specifically for internships, and some university/college programs now require internships. Beginning in 2014, MVI expanded its internship offerings considerably and publicized these through new long detailed internship catalogues on its web site. During the COVID shutdown, there were even some virtual internships. MVI staff and resident experts supervise the internships. The revised catalogue of available internships (and price lists) is online (monteverde-institute.org/Academics/Internships). Annual Reports show that MVI historically averaged about 9 interns per year. There were 14 interns in 2019, but very few in 2020 and 2021 because of COVID, and only 5 in 2022, but 11 by 2023. However, in 2024,

there were 41 interns! Most of these interns were connected to programs at MVI. Ten of these were required internships in a Carnegie Mellon program that also included Tropical Ecology, Statistics, and Spanish & Culture; 8 were internships only from Widener University; 4 came from the Everett Program at the University of California Santa Cruz; 3 were internships only from Smith College. Two interns each were from the Universities of Pennsylvania and Utah; only 5 US interns came on their own, plus 1 from the University of Costa Rica and another from the local Monteverde high school (Annual Report 2024; see below, Section on Facilities and Campus for Interns' work on MVI's campus and Section on Community Programs for their work in the community; also the spreadsheet on MVI Interns since 2017 by MVI Research Coordinator Moreno). In 2023, a new group, local high school students, served as interns, two from the Santa Elena High school (who need internships to complete their majors) and two from the Monteverde Friends School "as part of a school program in alliance with the Monteverde Institute to promote science, technology, engineering and mathematics (STEM) among female students" (Annual Report for 2023). In 2025, there were 44 interns, with 12 from Appalachian State; 7 from Carnegie Mellon, 5 from Utah, 4 from CIEE in San Luis, and 2-3 from other US colleges and universities (L. Zúñiga, pers. comm.; see 2025 Annual Report for detail). There have been so many interns recently, that MVI had to reorganize the ways staff and local advisors dealt with them. While the Academic Program continues to supervise academic internships, management of the Internship program was moved from the Research program to the CIC program, whose Coordinator initiated weekly group meetings with interns working in the same areas (Annual Report 2024).

In 2014, MVI developed detailed policies and protocols to deal with emergencies. This was initially in response to an assault on a student; MVI worked with Costa Rican lawyers and its major academic partners in the development of these policies. The following year, MVI added prevention policies to keep students from acquiring Zika when they were on field trips in lower elevation areas where the virus was present (the mosquitoes carrying the virus do not live in Monteverde's higher elevation). COVID led to a whole new set of rigorous safety protocols that followed the requirements of the Ministry of Health. Since then, protocols have been developed to cover nearly every conceivable type of emergency everywhere in Costa Rica that students go on field trips or visit on weekends; the type of emergency and contacts for help are posted on MVI's website and provided to every course instructor. (Monteverde-institute.org/Study Abroad/Protocols). Many of MVI's and MCL’s staff have been trained and certified in Wilderness Advanced First Aid (WAFA) or as Wilderness First Responders (WFR) thanks to a generous donation (Annual Report for 2023).

Facilities and Campus

During its first decade, the Institute occupied a series of small offices in the first Coop building, the Boehm House (the oldest structure in Monteverde, currently Rio Chante), and the Sunset House (near

Bajo del Tigre). In 1997, a new headquarters embodying principles of sustainable design was built on land purchased adjacent to the dairy plant in the center of Monteverde. Architectural design of the original building was done by local architect Olman Quesada with ongoing support from MVI's Board, staff, and Sustainable Futures courses (1993 to 1997), managed by Robert Shibley, one of the cofounders of the Sustainable Futures program. The other SF cofounder, Lynda Schneekloth, worked with SF students on the original landscape design for the campus (L. Schneekloth, pers. comm.). The building was designed as a "model of sustainable building practices, serving as a teaching tool on the topic" (MVI Annual Report 1997). Very little wood was employed in the building's construction; no wood from endangered species was used (as was common in other construction in the area). Instead, builders used concrete blocks, poured concrete, and steel roof framing; the roof was galvanized and painted sheet metal (Shannon 2007). Building design maximized natural light during the day; passive solar energy for heating and drying; and natural ventilation for cooling. Energy conservation has been a priority. Plans were to eliminate water run-off from the property; rainwater from the roof was to be collected in cisterns, used to flush toilets, and captured in a modern septic system. Greywater was to be cleaned in a reedbed/biogarden system. These features have not always worked as planned; for example, the biogarden has needed reconstruction several times. An intern added interpretative signs to explain how the biogarden functions. Students in the SF, University of South Florida, and Goucher/Mount Holyoke programs cooperated to design and build a new demonstration water conservation project, an outside dry composting toilet, in 2015 (J. Peña, pers. comm., MVI Newsletters 2014, 2015).

In 2002, a new wing was added to the main building; its central focus was the John and Doris Campbell Library with its collection of books, reprints, and digital resources, including student papers from MVI courses, for use by students, local and visiting researchers, and the broader community. The library also has Internet access (which has been provided in various ways), printers, and other electronic equipment; MVI also has high-speed wireless Internet connections from all campus buildings. MVI's library houses more than 6000 physical items, including many article reprints; paper records were gradually entered into an Online Library Catalogue. In 2007, a visiting librarian from the University of Vermont began to implement a new vision of the library as the resource center for the area (Kutner 2012). She designed a new library page on the MVI website with links for English and Spanish speaking researchers to search engines such as *Google Scholar*, English and Spanish databases, bibliographies, and the growing number of free public access electronic journals (including the *Directory of Open Access Journals*). Kutner (2018) stresses the importance of these open access journals for equity among researchers, especially those in Latin America who do not have access to expensive subscription journals. Several US universities have been supporting the development of MVI’s Digital Library Project that contains course research reports on Community Health, Sustainable Futures, and Tropical Ecology and is

searchable online. Study abroad students at MVI have password-protected access to all the journals subscribed to by their home college/university library. MVI's Digital Collection also provides free access to MVI's monthly climate data (2011 to date, plus data from the Laval house since 1981), Nadkarni's Epiphyte Phenology data, and GIS maps. There are GIS maps of many geographic features of Monteverde and the BBC. Most of the maps were made by Randy Chinchilla, MVI's former GIS specialist and Reforestation Coordinator, who left MVI in 2022; they include maps made for his thesis on the BBC but that are still useful (Chinchilla 2015). "As the MVI Library's digital presence continues to grow, the important supporting role of the library for researchers in the area and beyond is becoming more widely known, and, most importantly, there is steady increased usage of the library's varied and growing resources" (L. Kutner, pers. comm.; Kutner 2010, 2018; Kutner and Armstrong 2012; and MVI Newsletter articles in 7/15 and 7/16).

In 2015, MVI held a celebration for the Internet launch of the updated English and newly translated Spanish versions of *Monteverde: Ecology and Conservation of a Tropical Cloud Forest* (edited by Nadkarni and Wheelwright 2000 with chapter updates from 2014; see Bibliography below). This work, the major source on the extensive natural science (and some social science) research done in the region, is linked and accessible from the library's page on MVI's website. MVI's own website (www.monteverde-institute.org) has undergone numerous revisions over the years to reflect changes at the Institute as well as on the Internet. The website has easy to navigate drop-down menus with information and photos on all aspects of MVI and links to MVI's social media accounts, such as Facebook, YouTube, Twitter (x), and Instagram.

The MVI building also has classrooms (of various sizes) and offices; a laboratory (expanded and newly equipped in 2014); an auditorium; a kitchen; a roofed back porch eating, study, and meeting area; a reactivated weather station; and carefully landscaped surroundings that feature native plants and trees plus gardens that produce organic vegetables and herbs used by MVI's kitchen. Behind the main building is a small classroom building, constructed in 2002 by the Fox Maple School of Traditional Building (Maine) using non-native trees from MVI's property). Subsequently Fox Maple was remodeled, using designs from the Sustainable Futures course, to provide classroom and studio space on the main floor and in a loft.

As the number of students, courses, and MVI personnel increased, MVI needed more classrooms. Construction of a new outside timber-framed, multi-functional, glass-enclosed classroom in 2012 behind the main building was a collaborative project among local artisans and volunteers, and MVI courses. Timber for the building came from MVI's non-native trees; one wall was made from recycled glass bottles (Newsletter of 2/13). This striking and instantly popular new outdoor classroom, the remodeled Fox Maple, and the larger laboratory took some pressure off the immediate need for classrooms and

meeting spaces. In 2016, MVI relocated and expanded the kitchen, making it possible to provide many more meals, and then created a Spanish Program office in the old kitchen space. The kitchen started preparing lunches for all courses and groups on campus as well special meals in 2024. This arrangement provides financial benefits to MVI and provides the opportunity to promote its values with healthy organic foods from the Institute's own gardens and from local providers. It also encourages more interactions among students at tables under a new translucent roof connecting Fox Maple with the main building. The common areas were redesigned to provide more space for study and classes. Several birds even nested in hanging baskets on the open balcony. The reception area was remodeled in 2019 and 2024 (details from Annual Reports). Interns, under the artistic guidance of Gabriela Barboza (a former MVI Hormiguita camp participant), painted a mural in the two stairwells of the adjoining foyer in 2025 that depicts the Bellbird Biological Corridor (BBC), from the clouds to the mangroves (F. Perkins, pers. comm.; see below for MVI's involvement in the BBC). In 2024, MVI swapped the locations of the library and the auditorium, moving the library next to the reception and the auditorium to the larger space previously occupied by the library. The following year, K. Matarrita, the Cultural Exchange Coordinator, painted an excellent cloud forest mural on the front wall in the new auditorium (author's observation).

MVI added a new dimension with the 2025 inauguration of its Laboratory of Community Innovation (known by its Spanish acronym LINC). The Costa Rican government’s Ministry of Science, Information, Technology, and Telecommunication (MICITT) provided 18 sites in the country with state-of-the-art electronic equipment. They selected Monteverde's municipal government for one of these labs; the mayor asked MVI to house and operate the lab. Equipment includes 6 advanced computers, 3-D printers, drones, and industrial sewing machines housed in a former classroom. MVI built a large new workshop behind the main building to accommodate the large CNC (Computer Numerical Control) router, a laser cutter, and equipment from MVI's former workshop. Following more training, MVI's librarian and others will work with high school students and young adults from the Monteverde Zone and from BBC communities to develop their high-tech skills, leading to new products and to new careers (F. Perkins, I. Loría, pers. comm.; MVI Newsletter Nov. 2024; MVI Annual Report 2024). MVI has started offering training classes. LINC's first big Monteverde event was a free workshop offering firsthand experimentation with technologies such as artificial intelligence, robotics, drones, virtual reality, and 3-D printing. MVI held the workshop in early 2026 in alliance with the National Technical University's Liberia campus; those attending the full workshop received a Certificate of Participation (I. Loría, pers. comm.). Some MVI's classes should be able to use the equipment once financial arrangements are worked out. The loss of a classroom space to this project has put pressure on to add more classroom space; there is already a creative design for a new outdoor classroom (F. Perkins, pers. comm.).

Gifts of land, a house and other buildings by a local family (the Cressons) totaling 16 ha and the purchase (in 2000, with substantial aid from the late Rachel and Dwight Crandell) of a 14-ha reserve with primary and secondary forest and trails above the main building enlarged the campus. To retire part of MVI's debt, 7 ha of this land was sold in 2009 to the Costa Rican Conservation Foundation (Fundación Conservacionista Costarricense or FCC), which guaranteed its protection through a reciprocal conservation easement between the two organizations; the sale left MVI with a campus of 24 ha (D. Hamilton, pers. comm.). In 2011, MVI and FCC began joint ownership and management of the newly created 14 ha Dwight and Rachel Crandell Memorial Reserve above MVI's campus. This Reserve has been the site of MVI research projects, for example one monitoring bats and another (MoSI) monitoring survival rates of Neotropical migrant land-birds (D. Hamilton, pers. comm.). In 2016, a Lake Forest intern made signs for the trails and built a new entrance gate with a map and other information. The following year, another intern developed trail interpretations for the Reserve. In 2018, yet another intern worked on a landscaping master plan featuring native plants for MVI’s campus, including the path to the Reserve. In the post-Covid period, many camera traps recorded wildlife in this reserve. The Crandell Reserve borders the 28,027 ha of privately protected forest reserves known as the Monteverde Reserve Complex.

Since 2013, interns, students in service-learning courses, and volunteers have developed new demonstration teaching organic gardens behind MVI's main building, including demonstration "carbon gardens" around the glass classroom, vegetable and herb gardens, a medicinal plant garden, a pollinator garden, keyhole gardens (designed for dry season weather), rain gardens (to absorb rain runoff from the Fox Maple roof and promote infiltration), a biogarden (constructed wetland) that uses native plants and Musaceae (banana family) to treat greywater, a greenhouse for raising native plants, and an expanded native tree nursery that produces seedlings for reforestation. Interns in 2025 worked on MVI's solar energy, hummingbird garden, the youth camp, Strategic Plan, Research, and Community Health (L. Zúñiga, pers. comm.; see 2025 annual Report for detail). A donor funded (in 2019) a large new greenhouse that greatly expanded seedling production. IUCN-listed and smaller tree species became the focus of nursery production in 2024, to promote conservation of threatened species and inclusion of people with smaller areas of land. Native plants and tree seedlings have been used on MVI's campus and donated to local people and organizations interested in planting them, especially in the Bellbird Biological Corridor. The gardens are used for experiments with different sustainable agricultural techniques (including the elimination of invasive species). They also provide educational opportunities for MVI students, staff, homestay families, and other residents; for example, in 2024, 6 interns worked on "Farm to table integration: from the garden to the kitchen of the Monteverde Institute" with MVI's expanded organic gardens providing healthy food for more students' and visitors' lunches and snacks, in keeping

with MVI's mission (Annual Report 2024). Beginning in 2015, students constructed demonstration table gardens that were smaller, simpler, and cheaper than keyhole gardens but still at waist height and better for people with small yards and/or disabilities. MVI donated such small table and container gardens to many residents during the COVID shutdown. Volunteers have tagged trees behind the main MVI building as a first step to establishing an informal arboretum and calculating carbon dioxide sequestration rates in secondary forests (D. Hamilton, pers. comm.; MVI Annual Reports). Beds of native plants flank the main rebuilt (2014) entrance steps up from the road. Native plants are the focus of the New Forest Park in a strip between MVI and the road. The property, belonging to a MVI neighbor, had many large non-native trees, which were cut for lumber to construct the new Quaker Meeting House. Willow Zuchowski, founder of ProNativas, started this memorial garden in 2015 for her late friend and collaborator, Turid Forsyth. A path through the garden serves as another entry point to MVI from the main road. In 2017, two student interns from CIEE created interpretative signs and a table and seats; more native plants are being added (W. Zuchowski, pers. comm.). Interns have worked in all MVI's programs, even in the Communications Program and in the accounting office (Annual Report 2024).

Sustainable construction has been joined by sustainable practice at MVI. As noted above, greywater is treated on campus, and measures have been put in place to limit water runoff from the campus; in 2024, the greywater treatment system was "renovated" (Annual Report 2024). In 2021, MVI installed a new automatic rain catchment system based on research by the Sustainable Futures program and the University of Costa Rica's School of Biosystem Engineering that collects water from the main roof in a cistern to use for laundry, irrigation, and toilets (Annual Report 2020; Brenes, et al 2022). Two years later, MVI got an improved dry composting toilet through the CORCLIMA-led prototyping initiative, supported by Bosqueterno SA (F. Perkins, pers. comm.). The Institute uses biodegradable cleaning products and energy efficient lighting, and it practices extensive composting and recycling. Food scraps and yard waste are composted at a new (2024) larger composting shed on site; the resulting compost is used in MVI's gardens. The common area near the kitchen has barrels to separate all types of recyclable materials, some of which are taken to Monteverde's Center for the Recovery of Valuable Waste. Paper is reused as much as possible before recycling. MVI played an active role in developing community-wide programs to deal with recycling and solid waste disposal as well as grey and black water problems (MVI Annual Reports; see below). The Institute has also worked with homestay host families to help them develop more sustainable practices (MVI Annual Reports). Concern about bird conservation led the Institute to install vertical cords on windows (in 2021) to prevent bird strikes; the cords are being replaced with small stickers at research-informed intervals, a convenient and affordable solution from a provider in Costa Rica (F. Perkins, pers. comm.; https://evi.forcoscr.com/search/label/Aves%20y%20 Ventanas?max-results=100). MVI became increasingly concerned about minimizing and offsetting their

impact on climate change. Several MVI employees took part in a 2015 workshop run by EARTH University to learn how "to measure an organization's carbon footprint" (Annual Report 2016). MVI staff, students, and interns have made extensive campus measurements of the elements responsible for MVI's carbon footprint. Instead of investing time and money in a carbon-neutral certification, MVI has invested in participation with CORCLIMA (Comisión para la Resiliencia al Cambio Climático de Monteverde) since its founding in 2016 (F. Perkins, pers. comm.). MVI found more ways to conserve electricity, including the use of LED bulbs, and to decrease its fossil fuel use for transportation. In 2019, the Institute added 34 rooftop solar panels on the main roof over the former library wing and purchased a rechargeable electric golf cart for local errands. They also joined with the Fundación Conservacionista Costarricense (FCC) in large-scale reforestation efforts using native species to mitigate the effects of climate change (D. Hamilton, pers. comm.; see below).

Research

From the beginning, MVI was interested in fostering, facilitating, and applying research in the region, what Hamilton calls "the application of community engaged scholarship" (Hamilton 2019). Research done by international students and faculty working with MVI staff and local and visiting resource people continues to be made available to other researchers and the community through public presentations of research findings and the collection of research papers in the library; many student research papers from courses are now digitized. At the end of long courses, students present their research findings in symposia, which are broadcast on MVI's Facebook Live or You Tube channel and recorded. MVI staff members have conducted and led applied and long-term research projects in the Crandell Reserve and in the Bellbird Biological Corridor, such as those by Deb Hamilton, that started when she was MVI's Director. She has experimented to discover best reforestation practices for tropical native tree species, to carry out a forest integrity study (see below) to study carbon dioxide sequestration in tropical trees, dietary preferences of the Three-wattled Bellbird, and evidence for song learning in bellbirds (MVI Annual Report 2024; see bibliography below under Hamilton, Eaton and Hamilton; fccmonteverde. org/Publications; 2024 10.6.A). The current Director, Fern Perkins, who has studied lichens as bioindicators of pollution and climate change, has just published her research on agroecology in Monteverde, focusing on "Institutions supporting local producers" (Perkins and Cantor 2025). Other in-house research related to citizen science and monitoring projects is discussed below.

Monteverde has no central research station like the Organization for Tropical Studies' La Selva, but it has been an incredibly productive place for research, as seen in the nearly 600 pages of *Monteverde: Ecology and Conservation of a Tropical Cloud Forest* (Nadkarni and Wheelwright 2000 and subsequent updates; Burlingame 2002). Nadkarni organized a session at the 50th anniversary meeting of the Association for Tropical Biology and Conservation to figure out what made Monteverde so special in this

respect, calling the session "The Perfect Storm: Educational, Conservation, and Community Synergisms for Tropical Ecology Research in Monteverde" (2013). First the Monteverde Cloud Forest Preserve, and then MVI and MCL played a part in this synergy by welcoming outside researchers. MVI offered its outside researchers (Affiliates) an institutional affiliation, help obtaining required government research permits, and help recruiting local field assistants; WiFi, internet, and email connections; and access to MVI's lab, library and other facilities and campus. Affiliates have conducted extensive research in the Monteverde area. The Director's Report to the 2016 Assembly provides a partial list of research affiliates over the previous 30 years; subsequent Annual Assembly Reports discuss research by MVI employees and Research Affiliates each year. Since 2018, there have been about 10 Affiliates per year, many of whom continue over several years. The research Coordinator has prepared a spread sheet of researchers and their projects by year since 2015 (Moreno 2015-Date.). Affiliates' Research has included bird and mammal mapping, small mammals, bellbird conservation, effects of small-scale disturbance on epiphytes, epiphyte phenology of multiple species, responses of vascular epiphytes to drought, effects of epiphyte losses due to climate change on tree physiology microclimate and hydrology, seedling mortality in *Ocotea monteverdensis*, oilbirds, effects of freshwater crabs on leaf litter breakdown, impact of natural and anthropogenic change on the soil ecosystem of the Monteverde Cloud Forest, chemical destruction of PFAs, habitat restoration and bird ecology and citizen science, and bioacoustics technology innovations. Other affiliates investigate additional topics related to climate change, and a medical anthropologist studies gender and reproductive health (Moreno 2015-Date; MVI Annual Reports since 2016). Thanks to a donor, as of 2025, MVI can offer researchers the service or equipment for DNA sequencing; MVI has also started training local researchers to use this equipment (Annual Report 2024).

Resident Monteverde researchers were able to continue their research during the COVID shutdown, but international researchers could not come. To help compensate for this, Coordinator Moreno arranged an excellent series of virtual talks by international researchers on topics that included making collaborative recordings of natural sounds, using iNaturalist, updates on bellbird studies, climate change and vulnerability of epiphytes to climate change caused drought, diversity and natural history of Costa Rican bees, everything about bats, the Mi Ocotea project, and tools to create interactive maps (Annual Report 2020; videos of many of these are on MVI's YouTube channel).

MVI has developed important citizen science and monitoring projects. The oldest among these, Adopt-a-Stream, began in 2009. Luisa Moreno, MVI's Coordinator of this program since 2016, aided sometimes by interns, supervises stream monitoring via collection of biological (macroinvertebrate) and physical/chemical data and preparation of annual reports by students from the three main high schools (colegios) and recently some younger students (L. Moreno, pers. comm.; see her video on MVI's YouTube Channel, July 20, 2022). Donors have provided good equipment for the students to use in their

measurements. Moreno, with support from Bosqueterno SA (BESA), prepared an easy-to-use laminated guide for students and others with photos of local macroinvertebrates whose presence or absence indicates the water quality level of the Monteverde streams (L. Moreno, pers. comm.). For example, in 2016, The Santa Elena Reserve's group, Friends of the Environment (Amigos del Ambiente), composed of students from the Santa Elena high school, found serious stream contamination from untreated wastewater. Fortunately, this was not polluting drinking water that comes in its own pipes from springs and is treated with chlorine, but the polluted water was flowing to communities below (Guevara and Bonilla 2017, and J. Welch, pers. comm.). This long-term data set was important to the local commission studying problems of grey and black water. Following tropical storm Nate in October 2017, members of the MVI Program monitored local streams' recovery from storm-caused disturbance. Measurements after the COVID shutdown and lack of tourists showed improved water quality in the streams (L. Moreno, pers. comm.). The Santa Elena Reserve program, Amigos del Ambiente, closed during COVID. It was reactivated in 2023 and resumed participation in the Adopt-a-Stream program. The Cloud Forest School lost its high school because of COVID, but 5th and 6th graders participated instead; the Friends School high school students continued to participate. In 2023, the Moreno worked with the Monteverde Cloud Forest Preserve's (MCFP's) Environmental Education program Reverde5 to extend water quality monitoring down the Bellbird Biological Corridor (BBC) to Guacimal. Moreno worked on her own with students farther down the Corridor in Sardinal and Chomes (Annual Report 2023). Participants in "Adopt-A-Stream learn about the ecology and health of the streams, "raising awareness and promoting good practices in the use of water resources" (Annual Report 2023). In 2024, Moreno gave 10 workshops in BBC schools "on the relationship between the water cycle, cloud forest and epiphytes"; 3 tours focused on the cloud forests, water, and epiphytes; and 2 workshops on Aquatic Macroinvertebrates (Annual Report 2024). In 2025, 553 people, including students and interns, took part in the Adopt-a-Stream Program. Moreno also organized 14 activities for groups with MVI. She supervised water quality monitoring in 35 local streams, and some additional ones lower in the BBC. Moreno led 12 workshops and 3 other activities for students (Annual Report 2025). For example, she visited schools in the central part of the BBC, helping students construct a paper river on the floor to understand "how our actions impact aquatic life" (MVI Facebook Oct. 8, 2025).

A project, known as MoSI, started by D. Hamilton in 2014 in the Crandell Reserve and joined, in 2015, by L. Moreno, monitors the Overwintering Survival of Neotropical Migrants as part of an international network of bird banding stations led by the Institute for Bird Populations, Point Reyes, California (D. Hamilton, pers. comm.; MoSI is the abbreviation for Monitoreo de Supervivencia Invernal; see birdpop.org/pages/mosi). Interns, students, and community members (77 in 2025) take part in mist netting and banding the neotropical migrants and resident birds under expert supervision (see Annual

Report 2024). Populations of insectivorous bird species are declining worldwide because of a massive a decrease in insect numbers ("insectageddon"), as Dan Janzen and other scientists have reported (McClure, 2025). MoSI observations are likely to confirm that decline locally. Another monitoring project began with MVI's 2022 agreement with the Santa Elena Reserve for the installation of a Motus Wildlife Tracking System antenna on top of the observation tower in the Santa Elena Reserve; the Reserve and MVI are cooperating to resolve some technical problems with the system (L. Moreno, pers. comm.; motus.org; see Burlingame 2024 10.4). An additional monitoring project involves staff, interns, and volunteers in analyzing images from MVI's 20 camera traps in the Crandell Reserve and on private land in dry and rainy seasons. In 2025, 58 students/interns/participants were involved. The camera traps in the Crandell Reserve have now recorded images of 5 of the 6 wild feline species existing in Costa Rica; they have not yet detected a jaguar, but camera traps in remote areas of nearby reserves (Children's Eternal Rainforest and MCFP) have caught a few jaguar images (Wainwright 2007).

MVI participates in the annual Audubon Christmas Bird Count (CBC) with many others in Monteverde and around the world, creating an enormous Citizen Science international database that has been especially useful in tracking trends in populations of different bird species, which in turn aids conservation efforts. MVI staff participate in the Count, and MVI has been one of its local organizers and sponsors (L. Moreno, pers. comm.). Moreno reported that "CBC observers there [Monteverde] have seen dramatic changes in bird distribution over the 31 years of the local count"; she ties these trends to climate change and provides the example of White-breasted Wood-wrens (*Henicorhina leucosticta*) moving up to Monteverde from lower elevations (news.mongabay.com/short-article/counting-crows-and-more-for-audubons-christmas-bird-count 20 Dec. 2024). Moreno previously participated in a project (2016-2017) to replicate "studies from the 1970s and 1990s ... to document bird community changes as a possible response to current climate change" (L. Moreno, pers. comm.). Starting in 2025, she will be repeating a study of arthropods near the Monteverde Cloud Forest Preserve from the 1970s (Buskirk 1976: jstor.org/stable/2424394), with support from Ruth Buskirk. Moreno is also involved a Forest Integrity study with Hamilton. "This project aims to evaluate how areas restored with the FCC-MVI reforestation program, which were pastures about 15 years ago (La Calandria), have been recovering their functionality at forests" (Annual Report 2024). One way to evaluate the forests is by mist netting birds and comparing species found in the newer forests with those in older forests that were restored more than 50 years ago (L. Moreno, pers. comm.; see fccmonteverde.org).

Community Programs

The Center for Community Initiatives (known by its Spanish acronym CIC) evolved to coordinate MVI's interactions with the community; each of the component programs has its own interesting history. By 2025, CIC activities and programs included participation in local commissions, Investigation

(Research) including the Adopt-a-Stream Program, Internships, Community Health, Reforestation, Sustainable Futures, the Bellbird Biological Corridor, the Youth Camp ("Las Hormiguitas"), Cultural Exchange and Homestays, the Campbell Library, and the new LINC center. Many of these programs cooperate with each other and with other Monteverde organizations to develop special activities.

The former director of CIC analyzed "participative communication related to social and environmental sustainability" in the case of MVI's interactions with the local community (Avendaño 2017). She found that many in the community did not know what the Institute did and did not have active interactions with MVI; Avendaño worked to improve communications between MVI and the community. Two external events catalyzed increased interactions. The first was Tropical Storm Nate in 2017; the Monteverde area sustained major damage as roads and bridges were washed out, electricity, phone service, and water lines were cut. The Institute was in a section of Monteverde that was cut off in both directions; MVI became a community center. The local government and organizations (especially the Monteverde Institute and the Monteverde Community Fund), individuals, and the national government came together in remarkable ways to help people and restore services. They cleared landslides, raised funds, collected food and supplies, and distributed these donations to those most in need (Cobb 2017; MVI Newsletter 10/20/17; zonaltamedios.com). In the wake of Nate, MVI officially became a community emergency center, and it participates in the Municipal Emergency Commission; it is much more integrated with the community. The Institute has acquired emergency equipment, including medical supplies such as a defibrillator, and staff have been trained in its use (Perkins 2021; Annual Report 2017). Three Monteverde researchers analyzed the impact of Nate on the landscape, habitat restoration, and the community, finding that all 3 showed resilience in the wake of the severe storm damage (Hamilton, Chinchilla and Zuñiga 2018). The second external event that catalyzed increased interactions between MVI and the community and tested the resilience of both was the COVID pandemic in 2020 (see below).

MVI is involved in areas of community concern through special activities, its programs, and participation in local government Commissions and other organizations. In 2008, MVI began an Integrated Water Resources Program, which built on community concerns about overuse of water resources, problems with grey and black water, and water-related public health issues. A 2014 workshop at MVI led to the creation of the Monteverde Special Commission for the Comprehensive Management of Water Resources (CEGIREH; see Burlingame 2024 10.6. J). The Institute was a founding member (in 2010) of the Commission for the Integrated Management of Solid Waste (known by its Spanish acronym COMIRES) that included garbage/trash collections, recycling and composting (see Burlingame 2024 10.6.H). The Monteverde Commission for Resilience to Climate Change (known by its Spanish acronym CORCLIMA) grew out of 2015 workshop at MVI (see Burlingame 2024 10.6.K). The new Monteverde Environmental Technology Park (known by its Spanish acronym PTAM), founded 2020, aims to combine

aspects of COMIRES, CEGIREH, and CORCLIMA (see Burlingame 2024 10.6.L). In 2013, the Commission on Land Use Planning (known by its Spanish acronym COTEM) was established (see Burlingame 2024 10.6.M). MVI staff serve on the above commissions as well as on groups linked to the local clinic and public health board, and national organizations for physical activity, health, and adolescent health including suicide prevention (D. Cerdas, pers. comm.). Staff also serve in other local NGOs, such as BESA (Bosqueterno S.A.) (Burlingame 2024 10.2; lists of staff involved with each organization appear in MVI Annual Reports).

Another community organization with important ties to MVI, the Monteverde Community Fund MCF), grew out of an International Travelers' Philanthropy Conference held at MVI in 2011. MCF emerged in 2013 with the aim of directing some of the profits from tourism to "promote sustainable initiatives within the Monteverde region" (Wilkins 2011, 2021). After they received a major grant from the Inter-American Foundation, they were able to create a small grants program to support projects related to the environment and climate change and socio-cultural development in Monteverde. When Tropical Storm Nate caused so much damage to Monteverde in 2017, MCF like MVI, raised relief funds. The turning point for the MCF came with the COVID shutdown, when they became an important community actor in communication with their frequent e-newsletters, in the Enlace Sub-commission on a Circular Economy, in fund raising, and food purchases for distribution in parallel with MVI. Significant donations from the newly formed Coffee Tour Alliance and the Hotel Alliance allowed MCF to support more small grants for community projects, including some MVI initiatives, and some more extensive community efforts. They collaborated with MVI on the second and third community surveys and Summits (see below). MVI regularly works with MCF, and they both support community initiatives such as the Bellbird Corridor Festivals and the Monteverde International Conservation Film Festivals (Burlingame 2026, History of MCF).

MVI continues education and community outreach related to water, particularly through its Citizen Science Adopt-a-Stream Program (see above). Since 2019, MVI's Coordinator of the Sustainable Futures Program has worked with the University of Costa Rica's (UCR's) School of Biosystems Engineering on a variety of water-related conservation projects, particularly rainwater harvesting for use in laundries, toilets, and gardens and greywater treatments in artificial wetlands (documented in Annual Reports 2019-2023; see Brenes et al, 2022). In 2025, MVI collaborated with the same UCR School to develop various workshops; one was on bioremediation. They also worked with a neighborhood in the Cerro Plano area of Monteverde that was interested in developing wastewater treatment systems (A. Torres, pers. comm.).

The Community Health Program evolved from MVI's 1990s Family Life Program for women (Burlingame 2000) and the research that started in 2008: "The Impact of Economic Change on Food

Habits and Nutritional Health in Monteverde, Costa Rica: Mixing Agriculture and Tourism." This study was funded by the National Science Foundation in collaboration with the University of South Florida. Data indicated that as families increased their involvement in tourism, food insecurity and health problems increased (Himmelgreen, et al 2006; 2012; Ruiz, et al 2014). In 2012, MVI began encouraging better nutrition through workshops and demonstration gardens and small portable table gardens (starting 2015) to alleviate food insecurity issues. These efforts expanded during the COVID crisis.

More than 85% of Monteverde's economy depended on tourism (including educational tourism); its sudden cessation had devastating effects on all the people and institutions in the area (Shah 2020). MVI immediately joined the local government and other public and private organizations to create an umbrella commission called Enlace (meaning link or network) and 5 subcommissions (see details on community response to the COVID crisis in Burlingame 2024 10.1.C and Perkins 2021). The priority was to find those most affected and at risk of food insecurity. MVI and many others collected food and donations to buy local fresh produce to supplement the basic food basket the government started supplying. MVI, the Monteverde Community Fund, and CORCLIMA were the main organizations supporting Monteverde Produces and Buys Locally campaigns by developing many innovative activities and programs in cooperation with other groups working towards similar goals (S. Avendaño, pers. comm.; Wilkins 2021; VanDusen 2021,). As part of their Planting Sustainability/Small Jobs campaign MVI extended its previous program of tabletop and bucket gardens, donating many of the small container gardens for home use. MVI arranged workshops on sustainable gardening, made free videos on composting and organic gardening, prepared a free illustrated home garden manual, and supported a WhatsApp Chat where people who had gardening questions could talk to experts. The campaign included a video tutorial series "From our Roots" that featured older Monteverde residents explaining how to grow traditional foods and prepare them in healthy ways. Other Small Jobs Programs improved nutrition by giving out tropical fruit tree seedlings and Musaceae rhizomes (banana, plantain, etc.) and promoted reforestation through planting native tree seedlings raised in MVI's nursery. The multi-faceted Planting Sustainability program, supported by a GoFundMe campaign, empowered unemployed people and provided some indirect income; payment for work in these projects was in the form of certificates which could be used to buy groceries in small local mini-supermarkets or to pay utility bills in the same locations. MVI reimbursed the markets with the GoFundMe donations (S. Avendaño pers. comm.; Perkins 2021). To facilitate the Buy Local Campaign, MVI developed and updated an online contact list of local producers arranged by product category such fruits and vegetables, coffee, eggs and chickens, breads, and desserts, indicating whether the producer delivered to homes; the list included services (MVI Directorio de productos y servicios de Monteverde 2020 and subsequent dates).

The Community Health program also encouraged more physical exercise with a "Monteverde in Motion" program that began in 2012 with Zumba classes and other activities (J. Peña, pers. comm.). Several courses helped construct sidewalks in the Monteverde area to encourage more safe walking. MVI was without a Coordinator for the Community Health Program from the COVID shutdown until 2023, when they hired Daily Cerdas, a nutritionist who divides her time between CIC and the Academic department, where she helps with courses. Post-COVID, the Community Health Program offered workshops for the community and MVI staff on physical and mental health, nutrition, stress management, links to information on International Health Days, and MVI Blogs on health-related topics. Regular exercise classes at MVI for staff and the public have featured yoga, zumba, cardio-dance, and other types of dancing (Annual Report for 2024). Cerdas cooperated with the Cultural Exchange Program to hold 5 Culinary Encounters funded by MCF in 2023 and 4 involving 82 participants in 2024. "The focus of these activities was to promote the use of local foods and traditional recipes ... [and] to reinforce community integration and promote an improvement in the mental health of the participants" (MVI Annual Report 2023). The two Programs cooperated on the annual Community Picnics that stressed healthy eating and physical activity. Cerdas' Program also participated in MVI's Camp. In 2025, the Institute's Community Health Program celebrated International Children's Day in cooperation with Cine entre Montañas (Intermountain Films), Art on Wheels, the Children's Eternal Rainforest, the Santa Elena Reserve, the Monteverde Cloud Forest Preserve (MCFP), and the local Red Cross; 525 people participated (Annual Report 2025). A new form of interinstitutional cooperation emerged in 2024 when Cerdas accompanied the environmental education (EE) director of MCFP on her visits to local schools (grades 4, 5, and 6) in the upper and middle part of the BBC to give workshops on Healthy Eating. At the end of the program, each student received a fresh fruit (D. Cerdas, pers. comm.). In 2024, these workshops involved 13 schools and 250 students in the BBC. The following year, Cerdas broke new ground by uniting the 3 local environmental youth groups, Reverde (Monteverde) and Guazuma (Guacimal), both from the MCFP, and Friends of the Environment (from the Santa Elena Reserve) for workshops on non-violent communications, psychological first aid, and self-esteem (Annual Report 2025). The overall goal of the Community Health Program is to "promote an improvement in the physical, mental and social health of the CBPC [BBC] population through recreational, social, and educational activities" (MVI Annual Report 2024).

MVI began an annual week-long Camp for local 12–15-year-olds in 2012 during public and private school vacation. Counselors (former campers) aged 16-20 and adult volunteers from seven area communities work to "empower the next generation, cultivating their leadership skills and fostering the ability to instigate positive change within themselves and their community" (MVI Newsletter Fall 2023). The campers also have fun as they learn to work together (sometimes getting very muddy), care for their

natural environment, and participate in community service (monteverde-institute.org/summer-camp). The original group of campers named themselves the Little Ants (Las Hormiguitas) because ants can have a big impact when they work together. COVID paused the camp until 2022, when there was a record number of participants (40). The camps have workshops on nutrition, physical, and mental health and wellbeing, sex education for campers and a related workshop for parents in the evening, guided field trips (MCL's Bajo del Tigre in 2023 and the Monteverde Biological Station's trails in 2024), a volunteer workday, and reforestation activities at MVI, where they also climbed trees and zip lined (Annual Report for 2023). Both years saw a new cooperation between MVI and the MCFP's EE person in charge of Reverde5, many of whom were campers (D. Cerdas, pers. comm.). In 2024, campers worked with Art on Wheels (see Burlingame 2024 10.6.N) to paint a large mural, with conservation as a topic, which is attached to the doors of Fox Maple. It features a tree modeled after a large fig on the campus; one side shows the tree with healthy green leaves and vines, an unpolluted river, mountains covered with green vegetation, and birds flying overhead; the other side of the mural shows the opposite (facebook.com/Monteverde Institute, Aug.22 and Oct 2, 2024). Counselors selected for the 2026 Camp told Esteban Barquero, MVI's camp coordinator, about the impact their previous experiences as campers had on their lives, reinforcing values of "love, respect, perseverance, responsibility, empathy, kindness" and strengthening life skills leading to active participation in community activities (E. Barquero, pers. comm.). The camp is an annual event that depends on many volunteers, local organizations (listed in the MVI's Annual Reports), some interns, and donations (in kind and financial).

MVI has developed a variety of housing arrangements for students. At first, students lived and had classes in Monteverde Cloud Forest Preserve's main building and in local pensions and hotels until 1991, when some longer courses began staying at the Biological Station in Monteverde, built by Canadian entomologist Monty Woods in 1989. Located on the hill above Monteverde's gas station, the building contains sleeping and dining facilities, laboratory, and computer space and has easy access to primary and secondary forest (estacionbiologica.com). EAP courses continue to spend some of their time at the Biological Station, now under new ownership since the death of its founder. In recent years, some courses have also stayed at MCL's San Gerardo Biological Station in the Children’s Eternal Rainforest, the San Luis Development Association's field station, and the Costa Rica Conservation Foundation's La Calandria Field Station (F. Perkins, pers. comm.; see Burlingame 2024 sections 10.4 and 10.6.A). Yet other courses stay in small hotels or private lodgings, such as Capulin Cabinas and Farm (cabinascapulin.com). Many students spend some of their time living with local Homestay Families in the Cultural Exchange program. The new name of the program reflects its evolution from just placing students with local families to promoting cultural exchanges between the students and their host families and involving students in activities related to Costa Rican culture.

MVI's Cultural Exchange Coordinator, Karen Matarrita, works with a variably sized pool of about 80 local Monteverde families and 10 families in Cuajiniquil, Guanacaste (for EAP), matching them with prospective students to arrange homestays. MVI designs homestays to promote cultural exchanges, and they regularly include cooking classes for students that feature traditional Costa Rican foods, traditional dance classes, and a social gathering of students and their families at the end of each program. Students have been very enthusiastic about their homestay experiences, and many think they learned as much from the homestay as from their courses (see 2016 YouTube video at Monteverde Institute Homestay). Homestays also provide significant benefits for community members; for example, in 2025, MVI paid 73 host families about $84,370 for a total of 206 students (27 of whom were interns) for 3637 nights (K. Matarrita, pers. comm.). MVI has provided Homestay family members with free English, healthy cooking, computer, and handicraft classes; training in basic first aid by the local Red Cross; and workshops on topics such as dealing with challenging students, students with dietary preferences, mental health and stress, sexual harassment awareness and prevention, and LGBTQ+ diversity. MVI has helped Homestay host families to improve energy efficiency and water conservation in their homes and to implement recycling and composting. During the COVID emergency, there were no student groups at MVI and therefore no Homestays. After March 2020, the Cultural Exchange Coordinator pivoted to volunteer with Enlace's Sub-Commission on Social Aid; she helped gather and distribute food donations (including from MVI's gardens and food dropped off at MVI). She did try to make sure that Homestay families were taken care of (S. Avendaño, pers. comm.). MVI's program is working to develop economic opportunities for EAP's Homestay families in Cuajiniquil (K. Matarrita, pers. comm.). In 2021, two student interns did Homestays, but 11 families "participated in virtual intercultural exchange activities" with students from two courses in the US; in-person regular course Homestays did not resume until 2022. By the end of 2025, about 4050 students had participated in Homestays since the program started in the early 1990s (K. Matarrita, pers. comm.; Annual Reports). "The Cultural Exchange Program also works with the broader community, for example offering free specialized English classes at MVI and at the public library in Santa Elena and Kitchen Encounters," which resulted in a booklet containing healthy recipes made from local ingredients. They cooperate with other MVI Programs, such as the Community Health and Community-based Conservation Programs on the Community Picnics and the 2024 and 2025 Festivals, Between the Clouds and the Sea, in the BBC" (K. Matarrita, pers. comm.).

MVI's reforestation efforts, part of the Community-based Conservation Program, developed in partnership with the Costa Rican Conservation Foundation (known by its Spanish acronym FCC; see Burlingame 2024 10.6.A). In 2016, MVI signed an agreement with FCC to cooperate on a large-scale reforestation effort in the Bellbird Biological Corridor (BBC) and surrounding areas. Native tree seedlings, particularly endangered *Ocotea monteverdensis* and endangered oaks (*Quercus insignis*), were

raised in MVI's tree nursery and FCC's larger nursery, La Calandria, in Los Llanos. Many volunteers, especially from National Geographic Journeys, helped prepare soil bags for seedlings at MVI, which were donated to landowners for planting. By 2024, FCC and MVI had distributed about 295,000 free native trees for planting in the BBC (D. Hamilton, pers. comm.; Hamilton 2019; see Burlingame 2024 10.6.A). MVI's Community-based Conservation Coordinator since 2023, Daniela Quesada, details (in the Annual Reports) the number of seedlings produced each year. For example, in 2024, 18,303 native tree and 90 fruit tree seedlings were delivered for planting by 80 reforesters working in 27 communities in and near the BBC (Annual Report 2024). Just before rainy season begins in May, Quesada advertises that free trees are available for pick-up at MVI and that volunteers will help plant them. In 2024, raised tables were built in MVI's reforestation area, making it easier for people to prepare the seedlings. Reforestation with endangered species was supported by the Franklinia Fondation (sic) and the Morton Arboretum (see Burlingame 2024 10.6.A). The coordinator also gives many talks to groups and students about reforestation, cooperates with other Monteverde EE people to organize community activities to celebrate Tree Month and environmental days, coordinates maintenance and improvements to the tree nurseries and greenhouses, works with interns, and leads groups helping with reforestation activities (1547 people in 2024; Annual Report 2024). She is also promoting backyard biodiversity conservation and a new group, Forest Ambassadors (Embajadores de Bosque), to take care of endangered species and become part of "the next generation of conservation leaders" (F. Perkins, pers. comm). In 2025, she offered a free Forest Ambassadors course, promoting "Horticulture for Conservation" after participating in a training with Botanic Gardens Conservation International, and she gave a 3-day course on the ecology of the White Oak (Annual Report 2025).

FCC re-established its own non-profit status in 2024 and, reached a friendly agreement with MVI to independently pursue different but complementary goals. MVI's Community-based Conservation Coordinator, D. Quesada, continues educational and reforestation work with groups in MVI's campus tree nursery and greenhouse and the Crandell Reserve with a focus on endangered tree species (F. Perkins, pers. comm.). Quesada says that her program is the only Environmental Education effort in Monteverde that focuses on trees (Quesada, pers. comm.). In 2025, the program produced and donated 5709 trees, including 4879 native trees and 830 fruit trees; these young trees benefitted 67 people in 25 communities, and 207 volunteers helped plant them. Quesada led 2 school field trips to The Crandell Reserve and MVI's greenhouse and gave 12 workshops in 9 schools in 2025 (D. Quesada, pers. comm.). She cooperates extensively with other MVI programs.

In late 2024, MVI joined FCC and MCL to establish a new conservation organization, the Monteverde Conservation Collective (MCC), which started in 2025, helping establish conservation easements to protect privately held land in Monteverde and encouraging reforestation and other

conservation measures on that private land. With funding from the Cotyledon Fund, the new MCC will engage lawyers to draw up conservation easement contracts and fund detailed mapmaking and information about the program to share with interested parties. Willow Zuchowski generously donated a piece of property near the Monteverde Cloud Forest Preserve entrance to MCC, which will serve to anchor conservation easements and require oversight of these easements by the three organizations, a key improvement over the reciprocal easements between neighbors promoted in the Enlace Verde project in the late 1990s. (F. Perkins, D. Hamilton, L. Stallcup, and W. Zuchowski, pers comm.).

Interest in *Ocotea monteverdensis* grew out of research that started in 2005 showing that the fruits of this tree, which grew within narrow altitudinal ranges in Monteverde, were the favorite food of the endangered Three-wattled Bellbird (Hamilton, et al. 2018, Resource tracking...). D. Joslin arranged for aerial photography of the area showing the large *O. monteverdensis* trees with their distinctive yellow blossoms; he then worked with the GIS specialist at MVI to map all these mature trees. There were only about 770 of these trees left, and many of them were on private unprotected land. Joslin convinced the International Union for the Conservation of Nature in 2016 to list the tree on its Red List as Critically Endangered (Joslin, et al. 2018). Mi Ocotea was born as a conservation project in 2020 with a grant from the Franklinia Fondation (sic) that was administered by MVI. The project has focused on 4 areas: "(1) protection of existing mature trees and education of landowners of the same; (2) reforestation of disturbed areas (pastures and secondary forests) with seedlings; (3) encouragement of natural regeneration by releasing naturally occurring seedlings and saplings from intense competition; and (4) education of the local community through public lectures, events, classroom activities, publications, educational books and pamphlets, social media, etc." (D. Joslin, pers. comm.; Joslin 2018; see also: facebook.com/Mi Ocotea; MVI Blog: Jan. 20, March 7, and May 30 of 2016 and April 27, June 5, and Sept. 2 of 2020; Google: You Tube Mi Ocotea Monteverde for videos). A subsequent grant from the Franklinia Fondation expanded the number of focal species for conservation in the BBC to 10. The Morton Arboretum grant supports conservation of the critically endangered oak, *Quercus insignis*. Both endangered Ocotea and oak species are found in the Crandell Reserve, and their seedlings are raised in MVI's greenhouse (D. Quesada, pers. comm.). MVI's Quesada continues community outreach efforts for Mi Ocotea; for, example, in 2024, she gave Mi Ocotea workshops in 10 local schools, planted trees with MVI's Campers, and distributed 1000 copies of the Mi Ocotea coloring book. She produced new educational materials on *Quercus insignis* in 2025 following more research on the species (Annual Reports 2024, 2025).

Once service-learning courses started in 1995, MVI developed more focused course-linked programs and internships to promote community engagement (see Assembly Reports, Avendaño 2017, and Hamilton 2019 for details). In keeping with the vision and mission of its founders, MVI has used proceeds from its international courses, donations, and grants to support a wide range of programs and

projects that enhance education, well-being, environmental conservation/restoration, and sustainable development as well as culturally enriching activities in Monteverde and surrounding communities. MVI obtained Costa Rica's "utilidad pública" designation (a legal non-profit status) in 1995; the Institute must submit an annual very detailed documentation of their public usefulness to receive government approval (Perkins 2021). Additionally, in 2021, MVI earned authorization to receive tax-deductible donations in Costa Rica (F. Perkins, pers. comm.).

The growth of the Internship Program was discussed in the Academic Section above, and internship projects on MVI's campus were discussed above in the Facilities and Campus Section. Interns have also worked on many community projects including water quality monitoring (MVI's Adopt-a-Stream Program in areas throughout the BBC), local water use and management policies, greywater treatment, GIS, medicinal plant gardens, native ornamental plant landscaping, advancing sustainable development in Homestay family houses, promoting healthy lifestyles in selected Monteverde area schools, developing the Pacific Slope Trail (including promoting rural tourism along the trail; Bhatia et al. 2018, Deranian et al. 2022, Burlingame 2024 10.6.D), aiding people with special needs, and studying sustainability in selected tourism businesses. They have worked on CORCLIMA's climate resilience priorities such as carbon sequestration, and carbon offsets. Interns have also been involved in projects related to tropical forest restoration, forest integrity, permaculture, birds, and mammals; and they have recorded wildlife with camera traps (documented in Annual Reports; Moreno's spread sheet, MVI Interns since 2017). They have also had internships on well-known local sustainable farms, worked at the swap-shop (Tillicheria) established in 2020 by CORCLIMA, and contributed to empowering rural women who had small businesses in the lower end of the Bellbird Biological Corridor (Annual Report 2024).

The Sustainable Futures Program (SF), which began in 1995 as a partnership with the State University of New York’s University at Buffalo, was the first of MVI's continuing service-learning courses. By 2023, it had produced "more than 80 projects including designs, master plans, and construction of public spaces" (Annual Report for 2023). The Coordinator of SF worked with interns to create a Timeline with photographs of each project since 1991 (planning stages); projects are also listed in MVI’s Annual Reports (Torres 2024). SF projects have ranged from large-scale “scenario planning," development plotting and tracking of the area since 1950, and alternative scenarios for the future, to many specific projects for different organizations (L. Schneekloth, pers. comm.). MVI's Library has information on most of the projects. SF was involved in the Enlace Verde (Green Link) project of the late 1990s which employed GIS mapping and worked to link privately held forests outside of the reserves through different conservation strategies. Most properties owned or formerly owned by MVI were protected by conservation easements as part of the larger Enlace Verde.

Responding to requests from local government, civic groups, and community non-profit organizations, SF carried out projects to improve the quality of life. These ranged from the design and construction of wastewater treatment options to improving traffic flow through Santa Elena to the building of living walls (Assembly Reports 2016). Other projects addressed building and landscaping needs for local institutions, including public and private (non-profit) schools; the local Red Cross; the Monteverde Cloud Forest Preserve; the Monteverde Conservation League; the Santa Elena Reserve; a field station (La Calandria in Los Llanos); and construction and other projects with Finca La Bella in San Luis. In 2016, SF worked with the San Luis Development Association to design and partially build a public recreational park, the first in the area. The following year, continuing a new focus on the use of public space, SF participated with the local government in another "design and build" recreational community park project in the nearby town of Los Llanos, and they designed and helped build community parks for Santa Elena in 2022, 2023, and 2024; these parks include playground equipment for children. The "design and build" park in 2025 was on land outside of Santa Elena that was donated by Don Juan Coffee Tours. In 2025, SF again worked with the San Luis Development Association to design plans for multiple functions on land that had been donated next to the Community Center and Cemetery (A. Torres, pers. comm., Annual Reports 2017-2025). In 2018, SF designed a new office space in Santa Elena for the Monteverde Community Fund, the small public library, and UNED. UNED moved out in 2025 because it needed more space and was replaced by the swap shop La Tilicheria, which CORCLIMA had helped establish during the COVID shutdown. SF also designed an art and music workshop addition for the Friends School and a new kitchen and dining room for the Cloud Forest School as well as building rainwater collection systems and "infiltration lagoons" for both schools (Assembly Reports 2018, 2022, 2023).

SF students and several interns were involved in the planning for a Pacific Slope trail from Monteverde to the Pacific that would offer economic opportunities to small communities through rural tourism and advance environmental conservation by trying to establish a green corridor (see Burlingame 2024 10.6.D; senderopacifico.net). In 2016, SF produced one of the designs for a new field station that would be as green as possible for the head of the Pacific Slope Trail; the station opened in 2018 in San Luis (A. Torres, pers. comm.). Focusing on the lower end of the BBC, beginning in 2023, SF worked with women of the CoopeMolusChomes group to design a building where they could sell mollusks they harvested sustainably and have a restaurant (A. Torres, pers. comm.; Annual Report 2023; see Burlingame 2024, 10.6.D). Other recent major design projects include the Monteverde Environmental Technological Park (see Burlingame 2024, section 10.6.L), the Cerro Plano Community Gardens for CORCLIMA (in the former bull ring; see Burlingame 2024, section 10.6.K), the expansion of the Rio Chante Community Center, a prototype for accessible and sustainable multi-unit community housing for

Monteverde (at the request of the MCF), and analysis of MVI's own use of its spaces and its needs now and in the future, including 2025 designs for a dormitory and 2 cabins for potential use by students, families, teachers, or renters on MVI property (A. Torres, pers. comm.; Annual Reports since 2022).

In 2024, MVI shared a national prize with Monteverde's municipal government and CORCLIMA for the design of Avenida Verde, a pedestrian boulevard in central Santa Elena; SF produced designs for several aspects of this project (facebook.com/Municipalidad de Monteverde /August 26, 2024); Annual Report 2024; see Burlingame 2024 10.6.K). Since 2007, SF has elaborated plans for "greenways" in the upper section of Monteverde down to the gas station and "sidewalks" from there into Sta. Elena. SF, Goucher/Mount Holyoke students, and other service-learning courses worked with the local district council to make safe walkways and benches at a sunset vista point along the main road a reality (MVI Blog, 2/16; D. Hamilton, pers. comm.). Sidewalks now extend from the Cheese Factory down to Santa Elena and out the other side, thanks to CORCLIMA and the local government, with support from MVI. The SF Coordinator also works with several Costa Rican universities in the areas of management of water resources, artificial wetlands, bioengineering, city planning, geography, GIS, and study of the socio-economic needs of people in the BBC (MVI Annual Report 2023; see Burlingame 2024 section 10.6.D). He hopes that Costa Rican students from these universities will have the opportunity to develop their skills by being involved in planning specific Monteverde projects using the approach of the SF program (A. Torres, pers. comm.).

Other academic programs have contributed to research and service projects that benefit surrounding communities. For example, the group research project by Goucher/Mount Holyoke students in 2016 and 2017 focused on: "Land Use and Conservation in the Monteverde Zone: Comparing Forest Fragment Health with Socioeconomic Statuses and Local Perceptions." They worked to improve the La Calandria tree nursery for reforestation projects (Assembly Reports 2014-2018). In 2018 and 2019, they did group research projects on the rapid growth and impact of Airbnb rentals in Monteverde; by January 2019, there were 451 active listings in the area, a significant increase from about 300 the previous year. The students found that, while the rentals offered positive benefits to renters and provided extra income to the property owners, they sharply decreased the number of reasonably priced long-term rental units needed by teachers, researchers, and workers (GCMHC 2018, 2019); these problems persist in 2026. In 2018, students in the Goucher/Mount Holyoke program studied the impacts of tropical storm Nate on Monteverde, and, in 2019, did two studies related to climate resilience with CORCLIMA.

The DukeEngage Program constructed a rain garden for the Santa Elena high school in 2017 (Program blog: dukeengage.duke.edu). They were very active in reforestation and, in 2018, built a new tree nursery to raise lowland species in the very southwestern part of the Bellbird Corridor for the Women’s Development Association in Costa de Pájaros. (D. Hamilton, pers. comm.; Assembly Reports

2018). Many courses and interns have contributed to specific projects benefitting local communities; for example, in 2017, one course built a biogarden to clean greywater at a local farm, and another one constructed two aerial wildlife road crossings; yet another one, repaired and built trails for the Sendero Pacifico (Assembly Reports 2017-2018, Newsletters). In 2025, half of the 44 interns worked in Environmental sustainability and 2 worked with CORCLIMA (L. Zúñiga, pers. comm.; see 2025 Annual Report for detail). Recently, interns in the Carnegie Mellon program, in response to requests from local organizations, began offering free statistical analyses of many types of data sets (A. Paniagua, pers. comm.). By 2023, academic groups were increasingly involved with community initiatives: "8 groups joined the bird and Adopt-a-Stream activity, while 30 groups actively participated in reforestation activities...10 groups worked with 17 community projects with allied organizations," directly contributing $9017 to external organizations (MVI Annual Report 2023). The following year, 80% of the 37 academic groups participated in a CIC program activity; other groups contributed to community projects through partner organizations, or they donated funds and supplies for CIC programs and community organizations (totaling more than $10,000; Annual Report 2024). In 2025, 88% of the groups (30 of the 34) participated in at least one MVI community initiative, totaling 67 MVI community activities (figures do not include Nat Geo or students in short courses); these groups also contributed money or services to 21 allied organizations (A. Paniagua, pers. comm.). MVI has always supported CIC overhead with funds from its main source of income, academic programs, and from donations; in the last several years, it started including CIC costs in individual course charges. "Starting in 2025, a required contribution to the CIC has been integrated into course budgets, ensuring that 100% of groups financially support the Center for Community Initiatives, whether or not they directly participate in related activities. This initiative strengthens our commitment to the community and brings us even closer to fulfilling our mission as an organization" (Annual Report 2024). In 2025, that required contribution fee produced $3219 for CIC. Another new requirement was that each course/program include 1% in their course budgets to support the Educational Development Fund (Fomento Educativa) to support scholarships for Costa Ricans to attend MVI courses; this produced $2700 in 2025 (A. Paniagua, pers. comm.).

MVI has been deeply involved in several large-scale cooperative, conservation, research, education, and sustainable development projects that benefit the greater community. MVI, was a founding member of the Three-wattled Bellbird Biological Corridor Council (2007); along with the Arenal-Tempisque Conservation Area (ACAT-MINAE) of the national government and 5 other conservation organizations in Monteverde, they worked to turn lines on a map into a functioning entity (Burlingame 2024 10.6.D. The BBC (88,738 hectares) aims to connect the Monteverde Reserve Complex through 3 watersheds, 2 sub-watersheds, and 11 life zones down the Pacific slope to the mangrove forests of the Gulf of Nicoya. The Council hired a part-time Coordinator, developed a Strategic Plan (2011-

2016), and met with Corridor inhabitants and civic and community organizations to educate them about the project and seek their feedback and proposals. (CBPC 2011). One project was the promotion of community-based rural tourism linked with the development of the Pacific Trail, which would go the full length of the BBC (Bhatia et al. 2018, Deranian et al. 2022). Unfortunately, the Coordinator left, and COVID closed everything down. The BBC Council was reactivated in 2023; they commissioned a new Management Plan and hired a new Coordinator, who began implementing the Plan by reactivating local committees for each of the 6 sub-corridors established in the BBC, leading to a General Assembly for the whole BBC in late 2024 (CBPC 2022; see Burlingame 2024 10.6.D). To develop solidarity throughout the Corridor, MVI helped organize the first BBC Festival, Between the Clouds and the Sea (Entre las Nubes & el Mar) in 2024. They cooperated with the BBC Coordinator, many organizations in Monteverde and the rest of the Corridor, and Costa Rican universities to develop interdisciplinary and inter-institutional programs and activities throughout the Corridor that advanced personal connections, solidarity, and an appreciation of cultural differences, for example in food. Other goals included promotion of economic opportunities (including tourism and markets for food and other products), conservation of natural resources, and sustainability (facebook.com/Monteverde Institute, Oct. 16, 2024, includes programs and sponsors; see also MVI's Annual Report 2024). The success of the first Festival motivated MVI and other groups to organize a week-long Festival in 2025 (with the same name and similar wide sponsorship) in several BBC locations, ending in Cedral, near the BBC's middle elevation. The goals were the same as the previous Festival, but there were new activities including a producer exchange (with several BBC communities visiting sustainable farms in Monteverde), folkloric dancing, a family movie, historical exhibits and discussions of local history and the environment, a cooking contest ("cooking like my grandparents"), and stands promoting and selling many local products and foods. There were also educational stands, including one with MVI staff offering information on native trees, camera traps, and the biological corridor. CORCLIMA, which had provided free transport from Monteverde to Cedral, had an educational stand as did the University of Costa Rica's San Ramon campus (which brought its traveling laboratory), and the National University's School of Geography. Students got to participate in many activities, including visits to the Monteverde Cloud Forest Reserve and MVI; bird monitoring; and workshops on the BBC, camera traps, and technology (A. Torres & K. Rojas, pers. comm.; Instituto Monteverde WhatsApp Oct. 7, 2025).

The Institute also played an integral part in the Monteverde-Arenal Bioregion Initiative (MABI) that launched at a conference at MVI in 2014; representatives from conservation, research, education, and sustainable development organizations from the bioregion (the Monteverde Reserve Complex, the Arenal Volcano National Park, the Alberto Manuel Brenes Biological Reserve, and substantial buffer zones) met to create "more facilities, educational opportunities, more extensive conserved and restored areas...

sustainable tourism [that is] fully integrated with all of the people who inhabit the region?" (P. Raven in Burlingame 2024 10.6.F; MABI 2014-2017). Additional conferences in 2015, 2016, and 2017 developed contacts among participants and a proposal to establish a data base of all research, projects, and educational resources in the area. Unfortunately, the project stalled because of lack of money and personnel. MVI also played a central part in the creation of the Arenal-Monteverde Protected Zone Management Plan of 2014, written by the Director of CIC for SINAC (National System of Areas of Conservation) and funded by a debt-for-nature swap through Costa Rica por Siempre. Preparation of the plan created closer working relationships among conservation organizations and a series of excellent GIS maps; SINAC accepted the Plan and later (2024) appointed an administrator for the Zone (SINAC 2016, 2023; Burlingame 2024 10.6.G).

MVI's 2020 focus on helping the community in the face of the existential COVID challenge broadened and deepened MVI's connections with the community and strengthened the CIC. An Enlace sub-commission conducted a household survey, starting in March 2020, to learn about unemployment, food insecurity, increased mental health problems, and available resources to find those in need of immediate help. Another survey later in 2020 focused on COVID's impact on local businesses (Torres and Cantor 2020, Perkins 2021, and Burlingame 2024 10.1.C). The 2022 Second Household Survey and the Summit, orchestrated by MVI's CIC, with support from MCF, provided a transition to the post-COVID environment. The "Cumbre" (Summit), which included most of the private and public organizations in Monteverde, used the Survey results to paint the picture of the Monteverde "we have," then brainstormed to envision the Monteverde "we want," and sketched out how to "support the construction of the community we want" (MVI Cumbre 2022; see Burlingame 2024 10.1.C); this vision laid out a path forward for the new Canton of Monteverde, created in 2024 as Costa Rica's 83rd Canton, which made the local government more independent of the provincial government. The CIC program, with support from the Cotyledon Fund, Athabasca University, and MCF, organized a new community survey in 2025, hiring 3 young people to canvass and allowing online responses; the survey included all the communities in the canton and some in neighboring communities with ties to Monteverde. Preliminary results of the survey were presented at a new Summit held at MVI in November 2025. Responses were sorted along 3 axes: Social, Economic, and Environmental; each of these had sub-themes and participants moved among tables (each with a secretary) to discuss the themes (A. Torres and K. Rojas, pers. comm.). Some striking results of the survey were that in almost half of the households, someone had dropped out of school, and someone had a chronic disease. More than half the population had some kind of debt. "94% of respondents mentioned that it has become more difficult to find housing in Monteverde, linking this to rental prices, non-traditional accommodations, and 'gentrification'." (A. Torres, pers. comm.). The conclusion was that "the community does not question tourism itself, but

rather the lack of regulation and its consequences: cost of living, environmental impacts, real estate pressure, cultural changes" and they want the local government make regulations that will address these problems (A. Torres. pers. comm.). The final report on the survey will be available in 2026.

As the number and popularity of social media have grown, the responsibilities of MVI's Communications Program have increased. They have been producing the free online WhatsApp Instituto Monteverde Bulletin Board and the Monteverde Cultural Calendar (Arte & Cultura Monteverde) that include upcoming events at MVI and in the community and a link to the latest version of Monteverde Producers. The e-Bulletin Board and MVI's WhatsApp Chats were crucial for community communication during COVID. The Communications coordinator has traditionally maintained MVI's Facebook, Instagram, LinkedIn, and YouTube channel (since 2013), which are linked to MVI's home page; the Facebook site includes MVI's monthly climate data. MVI also livestreams and records relevant events and activities in the community as well as programs at MVI, for example, in 2023, "live streaming 26 different talks, symposia and concerts offered to the community for free" (Annual Report for 2023). Most of these are available on MVI's You Tube channel. The Communications coordinator has made posters (75 in 2023) to publicize events; taken photographs and videos of activities by classes, interns, and the summer camp; and helped with the development of MVI's new website. Since 2011, MVI and AMVI (Alliance for the Monteverde Institute) have cooperated to produce an e-Newsletter (at least twice a year) primarily for an international audience of course alums and friends of MVI and any locals who wish to receive it. The aim is to keep people up to date on happenings at MVI and to inspire them to donate to CIC projects. The Newsletter is emailed to people in a database constructed and updated by former AMVI member Bob Howe and Ignacio Loría, MVI's librarian, who is now in charge of the Newsletter design. Various authors have contributed interesting articles on many topics including biology, reforestation, sustainable gardening, health, and developments at MVI. In 2025, the first community podcast, Coffee in the Corridor, launched at MVI; co-sponsored by MVI, MCF, CER (Children's Eternal Rainforest), CORCLIMA, and Far Corners Community Musical Theater, with support from the National Science Foundation via Nalini Nadkarni; this podcast focused on the problems of waste management in Monteverde. The second Podcast, several months later, focused on constructive ways people were dealing with waste; both podcasts are available on Spotify and YouTube (Annual Report 2024, MVI Newsletter, Oct. 7, 2025; Facebook: Municipalidad de Monteverde, July 4, 2025; MVI WhatsApp Nov. 25, 2025). The First Monteverde Conservation Film Festival, co-founded by Nalini Nadkarni and Mariana Zumbado (MCL) in collaboration with Mountain Films of Colorado, occurred in early 2024 over 3 days and featured conservation themed documentary films shown in the Cabure auditorium and later at two local high schools. The purpose of the festival was to educate Monteverde audiences about important international and local conservation work and motivate them to create and support conservation efforts.

The festival was sponsored by NSF (thanks to Nadkarni), CER, MVI, MCF, CORCLIMA, the Monteverde Cloud Forest Preserve, and the Santa Elena Cloud Forest Reserve, all of whom presented information about their organizations outside the theater (MVI Annual Report 2024; see also monteverdeconservationfilmfestival.org and nalininadkarni.com). The following year saw the second Monteverde Conservation Film Festival, featuring local conservation documentaries, was longer (a week), and each day films were shown different locations, including MVI. Co-founder Zumbado of MCL, posted the program on the Monteverde WhatsApp Chat Arte y Cultura MV Oct. 23, 2025.

From the time MVI was founded, it supported the Arts. The auditorium (constructed in 1997) provided space and a piano for larger performance groups, and MVI began hosting the annual multi-week Monteverde Music Festival. Net income from ticket sales was used to purchase instruments, sheet music, and recordings for use in the area and to support music classes for local schools and students of all ages. A Ceramics Center, built in 1995 in MVI's former house/office, Boehm House, was a cooperative project involving MVI, resident potters, and the women's crafts cooperative (CASEM); it offered classes and glazing/kiln facilities. In 2000, the Ceramic Center became part of a new larger Community Art Center featuring local artists. The house and its property (with an attached conservation easement) were sold by MVI in 2006 as part of the effort to decrease its debt. While MVI continued to host some art events, it decided that there were enough other facilities, people and groups in Monteverde concentrating on the arts and that MVI "should refocus its efforts on the three cornerstones of its mission: place-based education, applied research, and community engagement" (J. Wilkins, pers. comm.). However, since 2013, thanks to generous local donors and a more financially secure MVI, the Institute again has been hosting and/or sponsoring many concerts as well as art exhibits, poetry festivals, and a story telling workshop. In an important new contribution to the arts, in 2015 MVI's Library welcomed the first permanent art collection of about 300 original paintings, prints, and illustrations by 16 local artists. Several of these artists had raised funds to commission a wooden cabinet to hold the art works; anyone may see and study them. Librarian Loría hangs a selection from the collection monthly on the wall of what is now the auditorium. Eventually these artists would like to have their own museum (MVI Newsletter, July 2015).

MVI continues to offer many talks, symposia, workshops, concerts, and other events open to the community, and most of them are free. These have been advertised regularly in posted flyers, and in more recent years, via MVI's WhatsApp Chats, Facebook, and Instagram. This author reviewed the listings on Monteverde's WhatsApp Chat for 2025 and found an amazing scope of activities open to the community that ranged from the Symposia for longer courses to reports by interns on their projects, to yoga classes, to cooking encounters including a December program to learn how to make tamales. There was a special cooking encounter in November (with 62 participants) to benefit migrant families adopted by the Monteverde Quaker community that featured recipes from Russia and Azerbaijan. There are

announcements of events from all the CIC programs and celebrations of special days or months, such as the Month of the Tree. The Coordinator of the Spanish Program (K. Rojas) gave a talk on Trees and the Imaginary in Literature. Rojas also gave a free 3-month program at MVI, with a math teacher from the Friend's School (and support from MVI's Educational Development Fund, another way MVI's Academic Programs support the community) to 25 local high school students to prepare them for Costa Rican public university entrance exams. Of the 22 students who took the exam, fifteen "students successfully passed, securing their path to higher education and proving that with the right tools, our youth can reach any goal" (MVI Facebook Jan. 26, 2026). The Spanish program held a celebration of the International Day of the Spanish Language and International Book Day that included a poetry recital, a short story contest on "Find me in the Forest," and storytelling sessions for both children and adults" (K. Rojas, pers. comm.). The first Talent Night for Monteverde's young people was held at MVI in November MVI, Far Corners Community Theater and MCF sponsored a workshop at MVI on eco-theatrical set design that started in December. There are notices for musical events at MVI as well as the Monteverde International Film Festival and other films, including a new documentary film and book release on The Golden Toad at MVI. There were also invitations to free talks at MVI, such as "Moss is the Boss" and "Unlocking hidden biodiversity with DNA Sequencing."

As Hamilton reminds us, the people who work at and for MVI are also members of the community, and benefit in many ways, including financial (Hamilton 2019). The substantial financial benefits to the community include payments to staff, teachers, taxi drivers, cooks, guides, and families offering Homestays to MVI students, as well as to owners and employees of tourism establishments and other businesses; much of this money then circulates in the local economy (F. Perkins, pers. comm). In 2024, MVI "injected approximately $1,073,945 into the local economy through payments to providers, and course coordination, activities, homestay compensation, and payroll" (F. Perkins, Annual Report 2024). In 2025, that figure increased to $1,116,556 (S. Torres, pers. comm.). Some in the community have also received individualized financial benefits such as scholarships to attend MVI courses or aid (for MVI employees) to continue their education.

Conclusion

During the COVID shutdown, MVI revised its Vision: "Build a sustainable and resilient future" and its Mission: "Promote social, ecological, and economic sustainability by integrating community initiatives with education, research, and conservation" (Perkins 2021). The new emphasis on active community integration reflects MVI's own evolution. The Monteverde Institute has exceeded the expectations laid out by its founders, and it has continued to evolve. From 1987 through 2025, MVI provided more than 860 courses to more than 14,500 international students. The wide range of courses reflects partnerships with many different institutions, which produces a solid financial foundation for

MVI. A centrally located impressive campus offers many state-of-the-art facilities essential to MVI's mission while putting sustainability and conservation into practice. As it has provided unique place-based learning environments for international students, MVI has encouraged more community engagement among students, researchers, interns, volunteers, and staff to develop and share applied research projects that generate information as well as options and a wide range of projects that help local communities and organizations deal with pressing issues that they have identified (Perkins 2021). The Institute and its staff play a vital role in the functioning of many local organizations. MVI has brought substantial educational, cultural, and economic benefits to local communities. As MVI recovered from the effects of COVID, the staff and Board turned their attention to the development of a new Strategic Plan for 2025-2030 (see 2025 draft plan by consultants Leñero & Asociados and MVI's final version adopted in 2026). MVI's Board President Pedro Belmar summarized the main points of the plan in his 2024 Report to the Assembly: "Strengthening the educational model...Financial sustainability...Expanding community impact... Governance and leadership" (2024 Annual Report). As it develops the elements of its new Strategic Plan, MVI is building on the solid achievements of its past and can proudly celebrate its 40th Anniversary in 2026.

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