

CREATING A SCIENCE BASED FORESTRY INSTITUTION



- 1 PCV Ron Billings observing Monterey pine with needle disease caused by *Dothistroma pini* near Constitución, 1969.
- 2 PCV Scott Cameron on forest insect collection trip - taking a break on the Piedra del Aquila, National Park Nahuelbuta, 1972.
- 3 UACH faculty of forest engineering buildings, viewed from the botanical gardens, 1971.
- 4 PCV truck on forest insect survey. Sometimes appropriate local technology is superior to the imported, 1974.
- 5 PCV Jesse Dubin and UACH student Ricardo Mascetti on student field trip near Lonquimay to study Araucaria pine, 1966.

From 1964 to 1975, Peace Corps forestry scientists helped build the forest engineering faculty of the Universidad Austral de Chile (UACH). Volunteers taught courses and carried out research in forest pathology, entomology and silviculture.

Volunteers were instrumental in creating the first fungal herbarium, scientific reprint collections in entomology and pathology, and a significant expansion of the insect collection at the University.



With their Chilean counterparts, these Volunteers identified the most important disease ever to affect the economically important Monterey pine plantations in Chile.

Their work led to the creation of the forest genetics tree improvement program at UACH, and the Forest Tree Improvement Cooperative, resulting in huge dividends to the Chilean industrial forestry sector.



GROWING SUSTAINABLE FISHERIES



- 1 PCV biologist Dorothy Hogg, investigating Chilean crustaceans in Coquimbo, 1976.
- 2 PCV marine biologist Richard Bennett works on techniques for artificial farming of clams with Chilean biologist Miguel Padilla at the Universidad de Chile, Montemar, 1976.
- 3 PCV Mike Mullin with artisan fishermen in Talcahuano, 1967.
- 4 PCV Peter Wadsworth pulling in cable with fishing cooperative members in San Antonio, 1967.
- 5 Wadsworth with fisherman cooperative members in San Antonio, 2011.

In the 1960s, Peace Corps Volunteers helped establish artisan fishing cooperatives based on efficient business practices and to promote sound capture methods. Many of these cooperatives continue to provide a livelihood to inhabitants of Chile's many poorer small coastal villages, and a source of protein for local consumption and export.

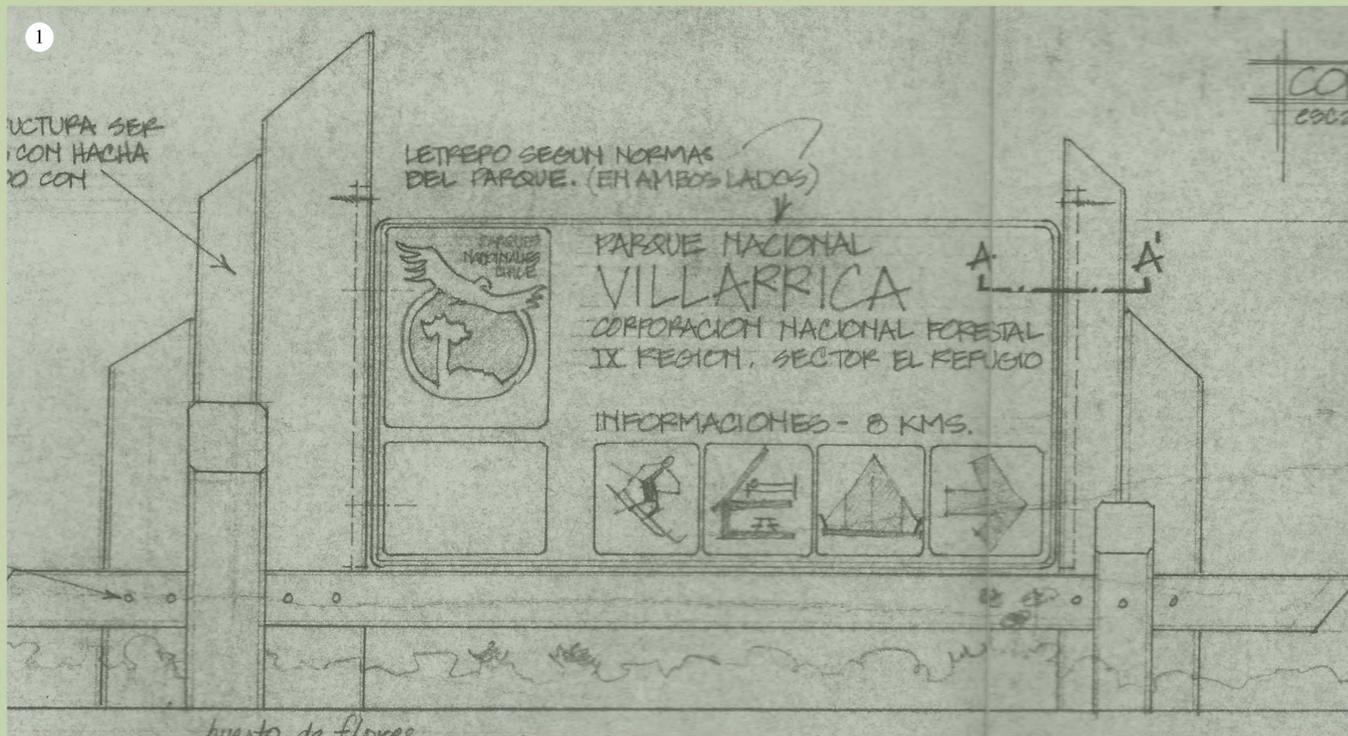
Recognizing the need for sustainable sources of seafood, Volunteer scientists joined with Chilean counterparts in the *Instituto de Fomento Pesquero* (IFOP) and several Chilean Universities to



develop mariculture of scallops, oysters, and mussels, and to protect the habitat of the Chilean abalone (*Ioco*).

In 1968, the Peace Corps helped the Servicio Agrícola y Ganadero introduce Coho and Chinook salmon to southern Chile. As a result, Chile is today a leading exporter of salmon to the world market.

These early contributions of the Peace Corps played a part in the rapid and sustained growth of Chile's significant seafood industry.



Peace Corps Volunteers helped create Chile's National Parks system, one of the most spectacular in the world.

In the last half of the 1960s, Volunteers carried out the ecological inventory of Tolhuaca National Park, the outline for management of tourism in Vicente Perez Rosales National Park, and the interpretive master plan for Puyehue National Park.

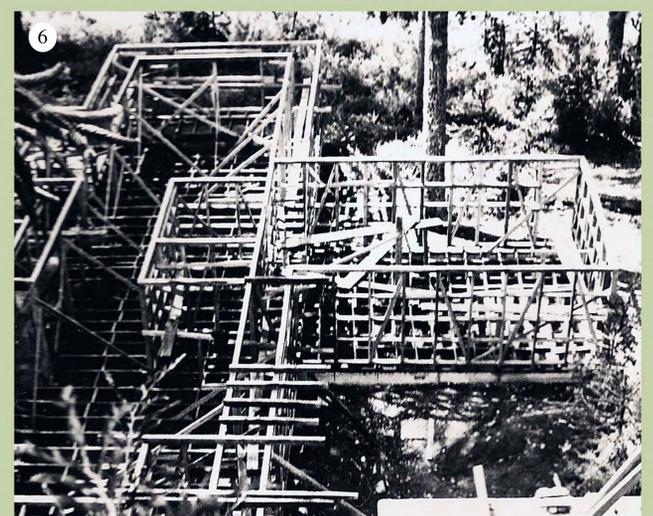
From 1975-79, PCVs teamed up with CONAF and Ministry of Education personnel in Temuco to design facilities and programs linking environmental education for students in the schools of gateway cities to national parks, using their work in Conguillio National Park as a model, and to develop plans and designs for visitor centers in Rapa Nui National Park on Easter Island and Torres del Paine National Park in Magallanes.

Today many environmental education programs exist in national parks because of the design work of Peace Corps Volunteers.



DESIGNING NATIONAL PARKS

- 1 Park entrance sign for Villarrica National Park, designed by PCV landscape architect Floyd Thompson
- 2 Entrance sign at Villarrica National Park
- 3 PCV Thompson working with CONAF construction engineers at Conguillio National Park
- 4,5 Guest house designed by PCV Thompson in Rapa Nui National Park
- 6 Visitor center under construction in Conguillio National Park





IMPROVING PUBLIC HEALTH

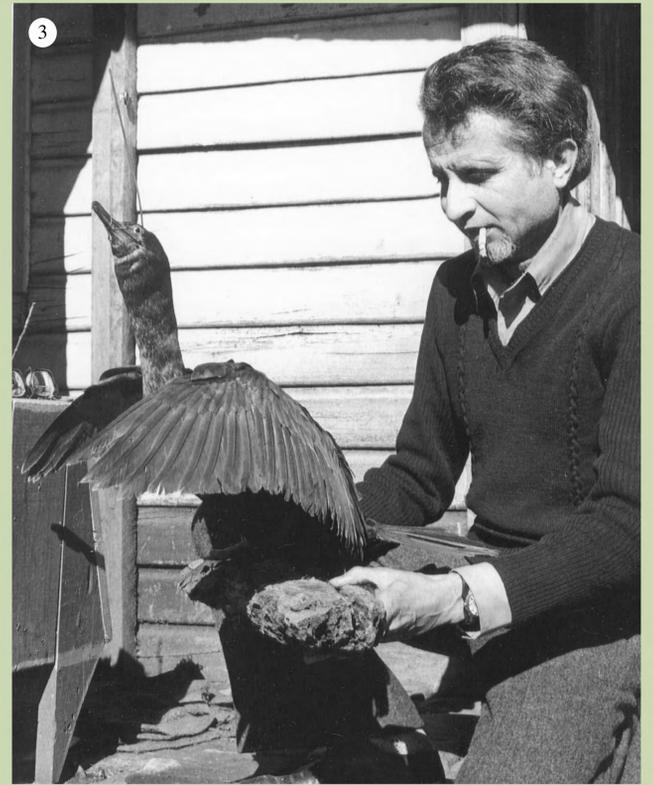
Peace Corps Volunteer nurses worked closely with the National Health Service and the new school of nursing at the Universidad Austral de Chile in 1964-66 to improve health conditions in Valdivia, a city recovering from the devastating earthquake of 1960.

The Volunteers assisted with maternal and child health, health education, and vaccination programs, supervised by a senior Chilean nurse. They served at the new John F. Kennedy Hospital, working alongside Chilean colleagues in pediatrics, burn, medical and surgical units. They trained Chilean nurses to carry on needed health services when they left.

Peace Corps nurses also served in Antofagasta in 1965-67, to train Chilean nurses at the regional hospital, and in Tocopilla to work in a tuberculosis program. During the late 1970s, a large group of Peace Corps Volunteer health educators worked in rural health clinics throughout the central regions of Chile, assisting with maternal and child health and basic nutrition programs for the rural poor.

- 1 Connie Shaw, PCV health educator, conducts health and nutrition classes to mothers and children in school in Las Cabras in 1980.
- 2 Kate Lorig, PCV nurse, counsils a mother regarding her child at the well-child clinic at Consultorio Gil de Castro in Valdivia.
- 3 Diane Myers, PCV nurse, takes the blood pressure of her pediatric patient at John F. Kennedy Hospital in Valdivia.
- 4 Mothers and children wait for vaccinations at school located in the hills south of Valdivia, in 1965. Jane Rushforth, PCV nurse, served this rural area with Chilean staff from Valdivia's Consultorio Gil de Castro.
- 5 Neta Fryloman, PCV nurse, prepares to give an immunization at the Consultorio Gil de Castro in Valdivia.





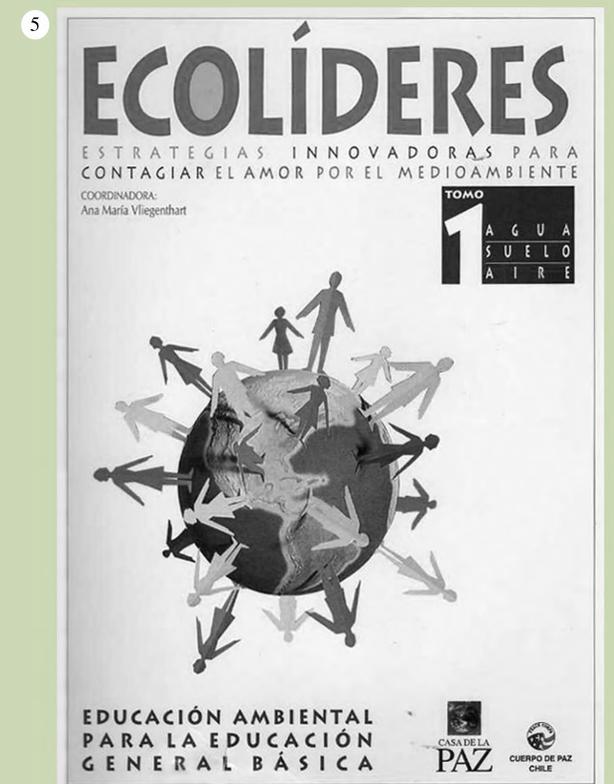
INTRODUCING ENVIRONMENTAL EDUCATION

From 1975-79, Peace Corps environmental specialists worked closely with Chilean national park managers and educators in the southern city of Temuco to create education programs for school children on the natural environment in national parks.

This model program first tested in Conguillio National Park led to a formal agreement between the National Forestry Corporation and the Ministry of Education for environmental education programs for schools in several gateway towns to national parks.

Formal environmental education in national parks spread throughout Chile and many variations of the Volunteer-initiated program operate in the nation's schools today.

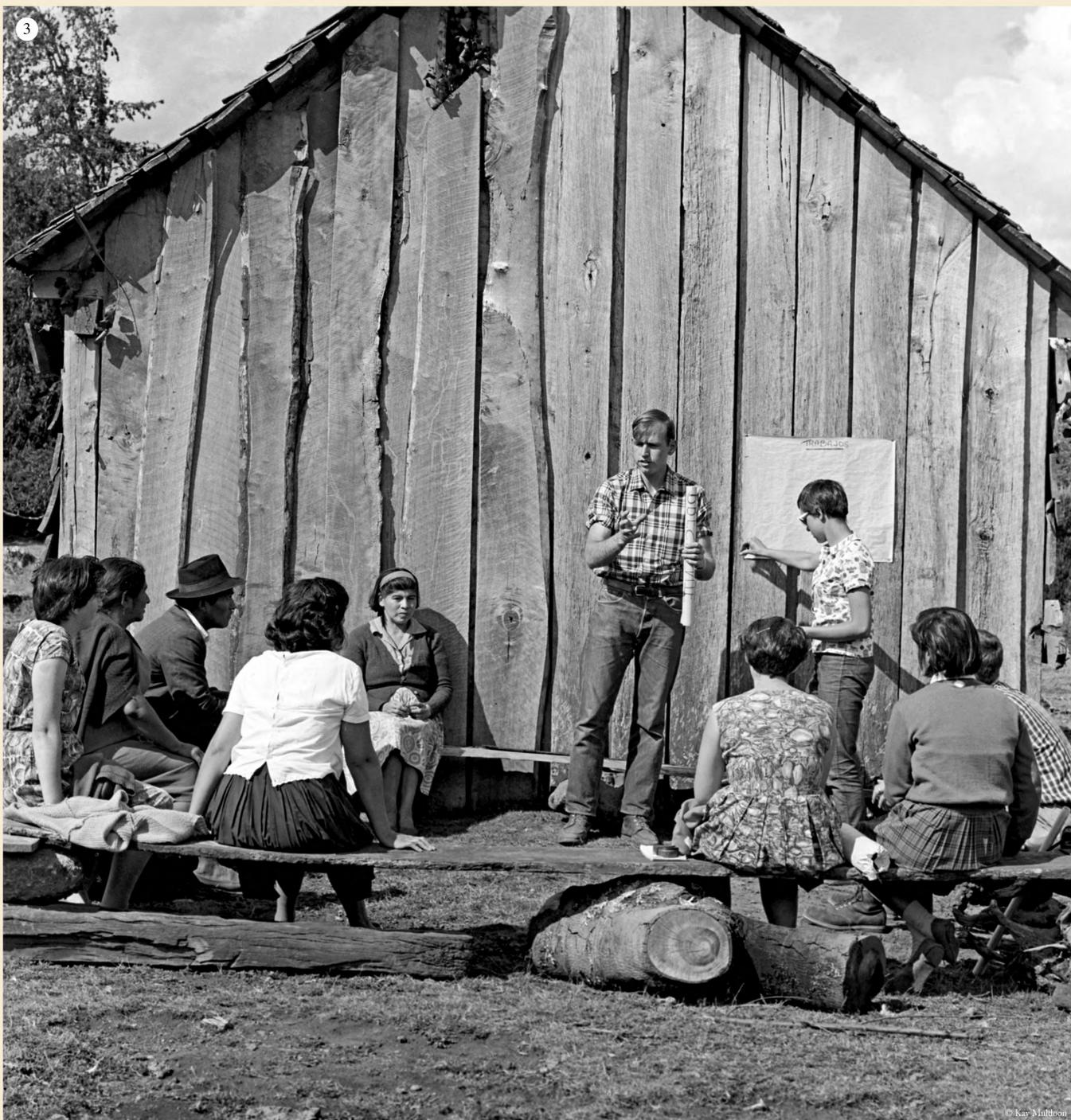
In the 1990s, Peace Corps Volunteers assigned to municipalities throughout Chile worked with the Casa de La Paz to design a comprehensive curriculum manual entitled "Ecolíderes", a valuable source for environmental education instruction in Chile.



- 1 PCVs demonstrate soil conservation methods in a workshop for Chilean teachers.
- 2 PCVs Floyd Thompson and Chris Janson working with Chilean teachers from Temuco to develop environmental education activities for students in Conguillio National Park.
- 3 PCV museum curator Roger Roget prepares a stuffed cormorant for a wildlife exhibit in a national park visitor center near Temuco.
- 4 PCV Linda Thompson works with CONAF Regional Director Santiago Gomez to create an instructional nature walk in Conguillio National Park.
- 5 Cover of the two-volume environmental education manual, "Ecolíderes", produced in 1998 by Casa de La Paz and Peace Corps.



PRESEVING MAPUCHE CULTURAL HERITAGE



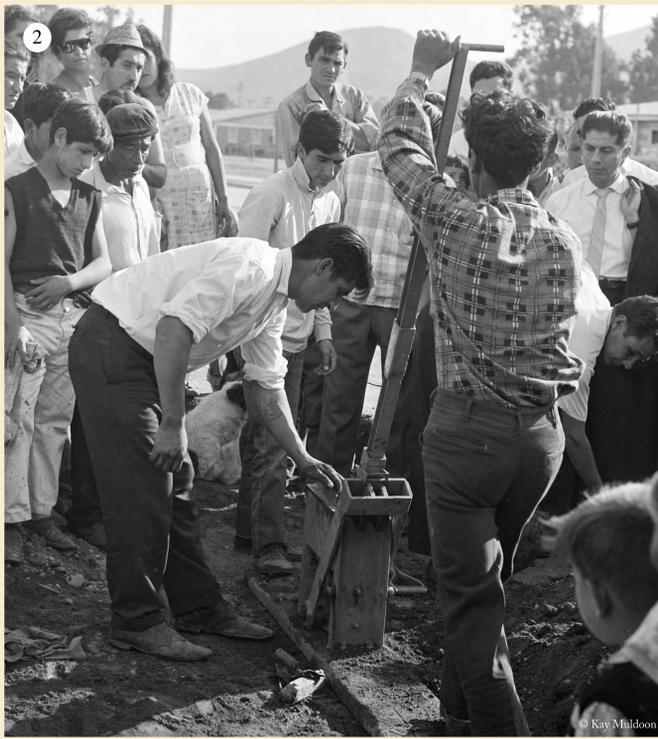
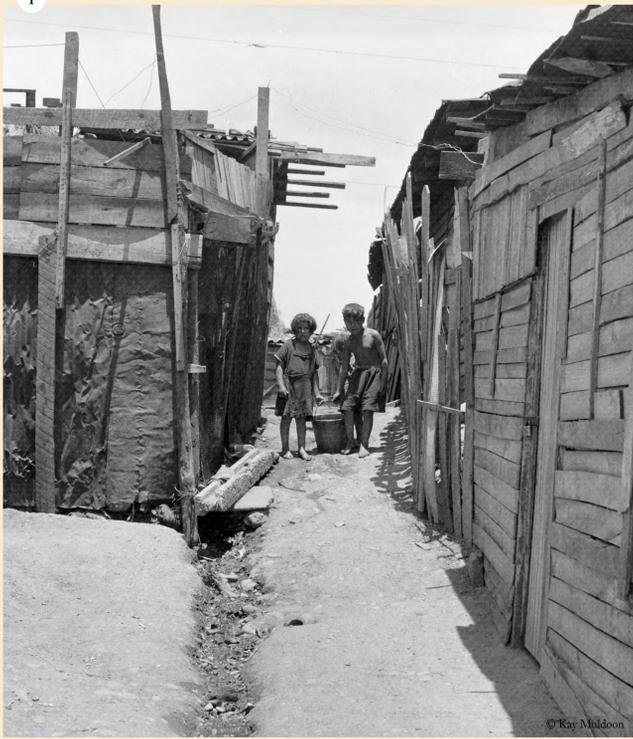
In the mid-1960s, in the Quetrahue, Ilima, and Icalma areas of the Araucanía region of southern Chile, Peace Corps Volunteers worked closely with Mapuche leaders and artisans to create an opportunity for families to supplement their income through the sale of traditional arts and crafts. They helped to identify reliable market outlets for Mapuche products first in nearby Temuco, and then in Osorno and Santiago. Mapuche artisan groups formed across the region as a result. The Volunteers advised the artisans in these new groups on quality control of weavings and woodcarvings, and helped them set up sales and bookkeeping systems.

Sales of traditional blankets, saddlebags, and belts increased and new products were introduced such as shoulder bags with traditional Mapuche designs, which, to this day, grace the artisan markets throughout Chile and in cities worldwide.

The partnership between the Peace Corps and the Mapuche resulted in more income and pride in the communities, and contributed to a broader and deeper understanding of the Mapuche cultural heritage.

- 1 Travelling from Temuco on the road to Chol Chol, a Mapuche family returns home from a day in town to sell a weaving and purchase food and supplies.
- 2 PCV G. Gage Skinner served in Chile between 1964-1966 with the Dirección de Asuntos Indígenas.
- 3 PCVs John Buzenberg and Gail Bakken talk with artisans in Icalma.
- 4 A Santiago shop sells Mapuche weavings in the 1960s.
- 5 A Mapuche woman weaves a blanket on her loom.
- 6 PCV Gail Bakken displays samples of Mapuche weavings.





SUPPORTING COMMUNITY BASED SELF HELP HOUSING



In 1965, Peace Corps Volunteers joined *Operación Sitio*, a program established by the Chilean government to help provide low-income housing for urban poor communities on the periphery of Chile's major cities. Volunteers, working within the Housing Services Corporation, organized self-help groups, trained homeowners to construct basic individual block and wood frame houses, and designed essential services, recreational areas, and homeowner social associations around Santiago, Temuco, Coquimbo, and Punta Arenas.

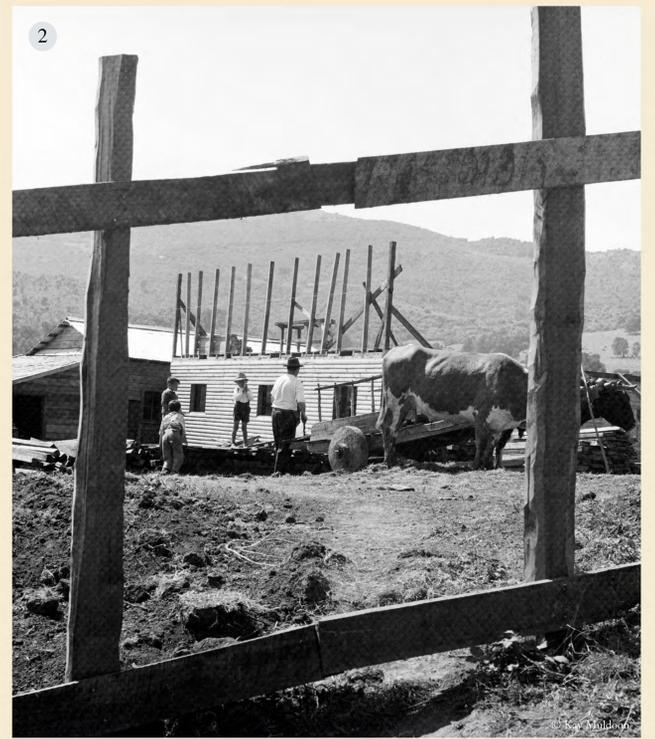
One Peace Corps Volunteer, working in the Nueva Palena neighborhood on the outskirts of Santiago, perfected the use of a simple machine, the cinva ram, to produce perfect building blocks. The machine made it possible for enough blocks for one house to be made in three days of voluntary work by the residents, speeding up the process considerably.

The Peace Corps Volunteers lived in houses built by the community during their two-year assignment, forming lasting friendships with their community leaders and neighbors. Today, many of the communities built under the self-help program have flourished, homes have doubled in size, and the neighborhoods now boast paved streets and active parks and playgrounds.



- 1 Urban slum in Santiago, where PC Volunteers worked with *Operación Sitio* in the late 1960s in self-help housing.
- 2 PCV Dave St. John, working a cinva ram machine with community workers in Población Jose María Caro.
- 3 Work crews mixing cement to use in a cinva ram machine to make blocks for houses.
- 4 PCV David Fisk, going over plans for new houses with the *Junta de Vecinos* of Población Colo Colo, a Santiago neighborhood.
- 5 A wood frame house gives up in Villa Pomona, in Temuco, where PCV Bruce Gordon worked with CORHABIT
- 6 Villa Pomona, Temuco, nearing completion, 1969.



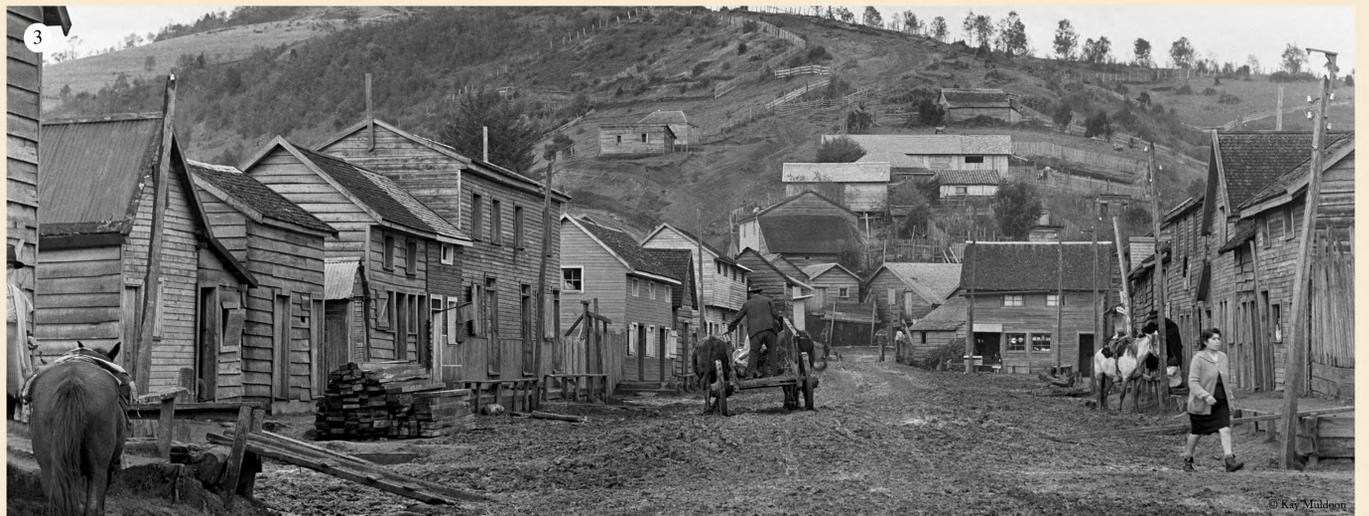


Trovolhue, a small town in southern Chile, was badly hit by the earthquake of 1960. The town sank several feet, so it flooded every year when the river rose.

In 1965, Peace Corps Volunteers helped design a plan to move the town to safer ground. The Volunteers obtained the required official approvals and heavy earthmoving equipment and financing to build a new access bridge. They surveyed and laid out the town streets, home sites, and essential services.

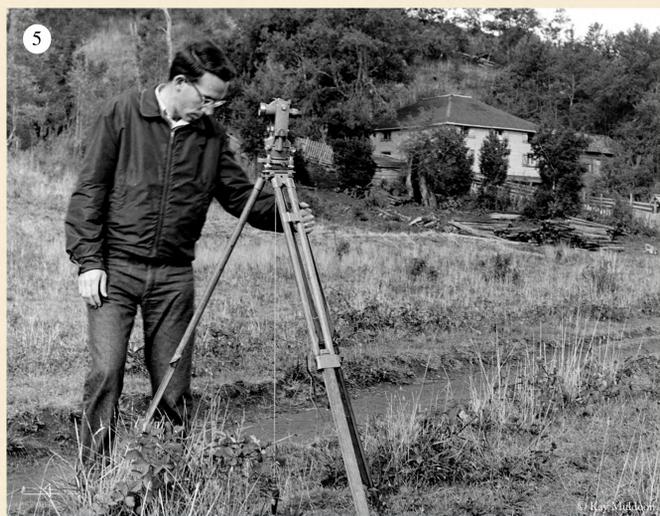
Public agencies and private organizations all contributed to move 100 families, who dismantled the existing homes and buildings and rebuilt them on the new site. Volunteers worked with townswomen to improve nutrition and health, and to increase income through home-based food preservation and clothes making.

After the Peace Corps Volunteers left in 1968, townspeople and the Chilean government continued to improve streets, built a new school and police station, and many more families moved to the new town site.



TROVOLHUE: A PEACE CORPS STORY

- 1 PCV Brian Loveman with community crew working on drainage ditches to make roads passable for construction.
- 2 Construction begins.
- 3 Old Trovolhue showing view from the old bridge into town.
- 4 Loveman goes over site plans with members of the town committee selected to direct the relocation project.
- 5 Phil Burgi, Peace Corps engineer, surveying road into new town.
- 6 PCV Sharon Loveman worked with townswomen on nutrition and health.





In the mid-1970s visionary leaders in Chile's National Forestry Corporation (CONAF), assisted by Peace Corps Volunteer wildlife biologists, set out on an ambitious, long term effort to protect important species of Chilean wildlife.

Successful programs based on the field work of Volunteers and their CONAF colleagues were established to delineate and preserve the habitat of the commercially valuable Chilean *chinchilla* and the endangered iconic *huemúl*.

In 1983, the national reserve for the *chinchilla* was established in the rugged, rocky slopes of Chile's northern mountain range near the small town of Salamanca, ensuring that wild *chinchilla* will be available to provide genetic input to the *chinchilla* fur industry.

In 2010, an area in the backcountry Nevados de Chillán, where the *huemúl* lives, was declared a Biosphere Reserve by UNESCO, increasing the chances that the Chilean deer who accompanies the Andean condor on the Chilean Coat of Arms will continue to survive.



- 1 PCV Connie Mohlis and CONAF park guard Baldomero Peña gather data at a *chinchilla* nest near Salamanca, 1975.
- 2 Provincial CONAF Director Jorge Silva presents PCV Mohlis with an award on behalf of the Municipality of Illapel, for her work on *chinchilla* protection.
- 3 Chilean national Coat Of Arms features the *huemúl* and the condor.
- 4 A *huemúl* in the Andean hills near Chillán.
- 5 PCV Tony Povilitis with university student Aviles carry out field work in *huemúl* habitat in central Chile.



PROTECTING VALUABLE WILDLIFE

