

LAFARGE

NORTH AMERICA

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A Portfolio of Lafarge's Activities with the Wildlife Habitat Council

Lafarge North America Inc. commits itself to environmental awareness and action participating in a number of local, regional and national partnerships to increase long-term biodiversity. Lafarge is the largest diversified supplier of high quality construction materials in the United States and Canada, such as concrete, aggregate, asphalt and gypsum wallboard. These products are used in communities to build homes, schools, hospitals, roads and bridges, as well as amusement parks and swimming pools.

Lafarge's involvement with the Wildlife Habitat Council (WHC) began in 1992, exemplifying a long-standing dedication to enriching pre-existing habitat and establishing new habitat on its corporate landholdings. Taking a leadership role as a member of the Board of Directors, Lafarge is playing a pioneering role and setting an example for other industrial companies. Projects already spearheaded by Lafarge range from native plantings, nest box construction and education outreach to site reclamation, wetlands restoration and fish restocking. Reclamation plans developed for pit and quarry locations take into consideration the environmental protection and views from the surrounding community. Rehabilitated lands have become important habitats for an astounding variety of plants and animals. Tree planting programs help control dust and noise pollution, reduce erosion during reclamation and decrease CO2 emissions. Nearly all the Lafarge properties participate in a Nest Monitoring Program installing artificial structures to provide safe and protected nesting areas.

Employees are an essential part of Lafarge's plan for environmental sustainability. Lafarge maintains an active environmental program designed to monitor and manage environmental matters. This program includes recruitment, training and retention of personnel experienced in environmental matters. Acting as responsible neighbors, employees build partnerships with local groups, such as the Boy Scouts of America, National Wildlife Turkey Federation, Pheasants Forever and U. S. Fish & Wildlife Service. This outreach offers opportunities for the community to engage in hands-on conservation projects and field experiences while gaining an enthusiasm for science and nature.

Lafarge seeks for all plants to implement a recognized environmental management system, such as ISO 14001. As part of this initiative, Lafarge plans for all of its operations to become certified through WHC working to connect the goal of each plant to habitat conservation and restoration in a regional and even global context. Currently, Lafarge has 15 certified and 46 active programs involved with WHC.

"Certification from WHC demonstrates a clear commitment to the environment and the communities near our operations. We view the process as a key part of our overall environmental plans. Lafarge employees have developed a great deal of proper habitat for native fauna and wildlife and take great pride in their efforts," said Chuck Smith, Vice President of Operations, Great Lakes Division.

Through all their efforts, Lafarge North America ensures a pledge to strengthen our communities, build civic pride and improve the quality of life. This portfolio showcases their notable environmental progress throughout North America.



"Lafarge North America's environmental policy commits that we will take actions to conserve nature for future generations.

Our partnership with the Wildlife Habitat Council has provided us an outstanding opportunity to meet this commitment and to be

recognized as the industry leader in conservation and wildlife habitat creation at our North American construction materials operations. The wildlife habitat projects Lafarge North America has initiated provide our employees an exceptional opportunity to work closely with our various stakeholders in conserving nature and giving a valuable natural resource back to the community where they live and work."

David Carroll, *Vice President*
Environment & Government Affairs



An osprey (*Pandion haliaetus*) pair is spotted in a nest at the Exshaw Plant in Alberta, Canada. This bird of prey chooses structures that can support a bulky nest and readily builds it on telephone poles and artificial nest platforms.

Photo by Paul Kalra



WILDLIFE HABITAT COUNCILSM

www.wildlifehc.org

Investing in an Island Town

A thriving wildlife program co-exists with industry at the Manitoulin Quarry in Ontario, Canada, one of the largest water based limestone quarries in North America. An environmentally conscious staff supports large-scale enhancement projects across the vast quarry property, which lies on the western portion of Manitoulin Island on Lake Huron. Creating artificial nesting structures and reclaiming natural areas initially spurred the effort along in the first year. The wildlife team installed nest boxes and raptor perches to increase the availability of nesting sites for black-capped chickadee, red-breasted nuthatch, northern flicker, tree swallow, American kestrel, wood duck and eastern bluebird. The nest boxes are spread throughout 5,000 plus acres containing mixed hardwood and grassland/shrubland areas.

The employees maintain areas of natural growth to support native plant communities. A former access road was covered with soil and protected from traffic, mowing or any other disturbance. Wild strawberries, milkweed and daisies quickly grew and

now flourish, among other flora, benefiting pollinators.

Community outreach extends to local schools that visit the quarry to learn about limestone production, use and natural occurrence.

The quarry is

open year round to visitors who frequent an observation area overlooking the blossoming habitat. Employees donate both financial and volunteer support to the local Gore Bay Fish Hatchery that works to raise fish, like Chinook salmon, rainbow trout and lake trout, for introduction into the waters of Lake Huron. Through a partnership with the Manitoulin Tourism Association, Lafarge helps maintain the Meldrum Bay Lighthouse and surrounding campground. Numerous nest boxes erected throughout the area provide safe and protected nesting areas. This commitment to wildlife habitat creation attests to long-term biological diversity while seeking ways to preserve the heritage of an island landscape.



Pictured here: songbird and northern flicker nesting boxes.

A Place to Share With Wildlife and Kids

Alpena Plant employees have put in many hours of work to return an old shale quarry area to a natural state. The former Paxton Quarry was simply left to fill naturally with water, and as the water accumulated to its deepest point of 70 feet, a group of employees began centering their wildlife habitat around the forming lake. In 2003, Lafarge began a fish stocking program planting over 20,000 blue gill, channel cats, rainbow trout and fathead minnows. Overtime the former quarry will grow into a self-sustained fishery. The U.S. Fish and Wildlife Service provides advice on suitable species for the lake. To increase the fish survival rate, retired Lafarge employees constructed fish shelters, placed them on the ice in winter and they now rest on the lake bottom, plus submerged trees and shrubs, as well as rock piles accommodate the fish in their new home.

The 600-acre property located in northern Michigan offers a variety of migratory bird habitat comprised of open water adjacent to mixed hardwood stands, largely red oaks, with a lush understory of herbaceous vegetation. The National Wild Turkey Federation

and Alpena High School forestry class helped plant the native red oak trees along with crabapple, which provide food for wild turkey and white-tailed deer. In 2004, fourth and fifth grade students from Wilson School planted an additional 700 seedlings, such as black cherry, dogwood, highbush cranberry, Washington Hawthorne and



Employees proudly display the new certified sign at the Alpena Plant, which has been WHC certified since 2001.

crabapple, purchased from the Alpena Conservation District. During the day, students had a chance to view nesting tubes they had constructed now in place around the lake and identify mallard ducks. An abundance of common loons and variety of other shore and wading birds, such as piping plover and great blue heron, along with bald eagles, now frequent the lake.

"It has been especially rewarding to see the kids get involved and all the fun they have had planting trees and enjoying the area. Seeing new species of wildlife moving in has also been very satisfying - makes it apparent that our efforts are paying off," said Gil Peterson, Wildlife Team Member. An "Open House and Family Fun Day" was hosted at the plant in 2004 inviting the entire community.

The ongoing initiatives draw extensive commentary from the media and national recognition. In 2003, the Alpena Plant received a high honor winning a Cement Industry Environment and Energy Award for overall environmental excellence. Michigan State Senator Tony Stamas praised the plant stating, "In establishing this wildlife habitat, Lafarge has shown why it is a leader in sustainable development. By working with the community on this project, Lafarge sets a great example of business giving back."



A piping plover (*Charadrius melodus*) protects its eggs near the new quarry lake.

Photo by Megan Oemke

Certified Habitat Programs at Lafarge North America Inc.

Lafarge North America has 46 corporate-owned facilities that have established 'Wildlife at Work' programs in the United States and Canada. Currently, Lafarge has achieved WHC certification at 15 sites. WHC's *Corporate Wildlife Habitat Certification/International Accreditation Program* recognizes commendable corporate wildlife habitat management and environmental education programs. Since 1990, WHC has certified hundreds of programs at corporate facilities around the world providing third-party credibility and an objective evaluation of projects. Certification validates wildlife habitat projects to employees as well as the community at large, transferring sustainability into people's everyday lives. Visit www.wildlifehc.org to read more detailed descriptions of the following programs.

Fourteen nest boxes were initially set up at the **Churchville Quarry** in Bel Air, Maryland, to increase viable nesting sites. Boy Scout Troop #809 and Girl Scout Troop #881 added four more boxes in 2004. Spread across 20 acres, the boxes provide nesting habitat for eastern bluebirds, American kestrels, purple martins, wood ducks and bats. A member of the Young Marines monitors the bluebird nests while the wildlife team observes the other boxes. Carefully placed raptor perches provide optimal hunting conditions along with scattered brush piles, and already have produced sightings of red-tailed hawks. Yearly tours are given to local schools and groups, and a community newsletter is distributed promoting educational awareness. The facility was a recipient of an About Face Award from the National Stone, Sand & Gravel Association for constructive and positive efforts to enhance the appearance of the facility's operations.

With over 750 acres of land flanked by urban growth, the **Frederick Quarry** in Maryland created an animal refuge within the open fields and small woodlands. To increase nesting and the biodiversity of these areas, the wildlife team, with the help of Local Boy Scout Troop #273, constructed and installed eastern bluebird, prothonotary warbler, wood duck and American kestrel boxes. Due to a loss of farm fields and grasslands in the surrounding parts, the team placed brush piles around the open fields to provide cover for birds and small mammals. As part of the management plan, grass was permitted to grow in the fields and around settling ponds, particularly during nesting and breeding seasons, and using herbicides on-site is limited. Raptor perches in the field areas were installed to encourage red-tailed hawks, American kestrels and smaller birds of prey from hunting near highly trafficked areas. The Frederick YMCA utilizes a 144-acre portion of the property for an annual summer day camp.

The wildlife team at the **Fredonia Site** in Kansas discovered a lack of cover and living space for various species during an initial inventory of the property. Employees erected floating goose nests in ponds and a nesting island on a settling basin. These additions prevented the perpetual problem of raccoons stealing the eggs. The wildlife team also worked with elementary and middle school children in Fredonia School District to build eastern bluebird nest boxes and plant a butterfly garden.

The **Harleyville Cement Plant**, located northwest of Charleston, South Carolina, contains forested and wetland areas. A regular flow of groundwater from the quarry creates small ponds that provide natural habitat for migratory waterfowl, resident alligators and other species. The Wildlife Habitat Management Plan focuses on conserving pollinators and developing native bird habitats. A butterfly garden was created by a quarry pond with a variety of wildflowers, such as purple coneflower, white snake root, oleander and imperial blue, with two additional gardens under construction. To support the purple martin population, employee volunteers worked with first and second graders from Williams Elementary School to build and paint triple-decker birdhouses. The South Carolina Waterfowl Association installed wood duck nesting stations near the quarry ponds.

WHC certified since 1995, over 1,700 acres of habitat are devoted to wildlife habitat at the **Marblehead Quarry** in Ohio. A designated bird sanctuary contains many of the 35 maintained nest boxes, some fully occupied with inhabitants. In partnership with Pheasants Forever, several acres of switchgrass were planted benefiting the local pheasant population and preventing erosion. The food plots are maintained for cover and food value with planned stages of rotational mowing and prescribed burns. Quarry employees manage a tree nursery that supplies native species for reclamation areas on the property. A landscaped area was enhanced for wildlife with the addition of native plants, such as spirea, yarrow, coreopsis and phlox. Lafarge works with the Ohio DNR Division of Natural Areas and Preserves to protect a naturally growing population of federally endangered lakeside daisy that was discovered within the quarry. Portions of the habitat are now permanently protected as part of the Lakeside Daisy State Nature Preserve.

Portions of a 103-acre stretch of landholdings are actively managed for wildlife at the **Niagara Plant** in New York. Some areas are retained through power line rights-of-way and have vegetative restrictions. Planting low growing evergreens and shrubs in the area both reduces dust pollution

and shelters local wildlife without interfering with the power lines. A green space was created by an employee with a plot of evergreen trees and shrubs to increase the amount of natural cover available to local wildlife populations. Named in the person's honor, "Perry's Island" provides increased aesthetic value and ideal nesting places for bird species while preventing dust pollution and buffer noise. Also dedicated to an employee, "Foley Park" contains white pines, blue spruces and low-lying shrubs for more nesting areas and cover for small animals.

Four major wildlife habitat programs are maintained on 255 acres at the **Paulding Ohio Facility** in northwestern Ohio. "Hillside Wildflowers" helps deter erosion between the cement plant and quarry through the applied use of topsoil and planted blend of native wildflowers. The "Front Yard Project," reduces the use of mowing and creates an ample area that attracts insects and avians with aquatic animals in a new half-acre pond. Native prairie grasses, trees and wildflower beds provide cover and space while a new pond supplies a water source. "Project Green Spaces" brings life back to the barren areas on-site and controls sediment runoff while beautifying the property with vegetative varieties of native plants, such as barberry and butterfly bushes. In the "Windbreak Program," planting an additional 6,969 trees, including fast growing willow hybrids (austrees), Norway spruce, bald cypress and silky dogwood, minimized wind velocity and established a visual barrier near the quarry reserves while providing cover for wildlife. The Ohio Department of Forestry and Paulding County Soil and Water District helped with suitable species selection for the local soil types and plantings.

The **Presque Isle Quarry** is located on the west shore of Lake Huron in Michigan. Through a combined effort of employees and local Boy Scouts, 30 nest boxes were built and placed near areas of the quarry that offer water and food sources. The food plots, which total ten acres, exist in open areas and between wooded tracts near water and meet the nutritional needs wild turkey, white-tailed deer and rabbit populations. The National Wild Turkey Federation Alpena Chapter helped plant 90 high bush cranberry, swamp oak and white pine seedlings to enhance the turkey habitat. In the north quarry lake, 1,000 rainbow and 1,340 brown trout were stocked and a gravel nesting bed was added for potential fish spawning habitat. The team also provides tours for local schools, and a local college uses the property for instructional classes on proper land management, wildlife enhancement and reclamation.

Established in 1995, the Deer Mountain Nature Preserve and Trail System is maintained at the **Ravena Plant** in upstate New York. Over 40 habitats ranging from beaver dams to bedrock outcroppings fill a 150-acre preserve of undisturbed forests and wetlands. Two individual paths contain 43 environmental markers on the native flora and fauna winding along multiple ecosystems. Northern water snakes, snapping turtles, marsh hawks, wood ducks and aquatic insects make their homes at the Snapping Turtle Pond. The Spring Pond boasts grey herons, mallard ducks and painted turtles on its list of inhabitants. Local Boy Scouts are helping with vegetation habitat enhancement by selective cutting in the medium and upper forest canopy to promote new growth of ground cover and reintroduce a large amount of sunlight. Each year, roughly 400 students from the Ravena-Coeymans-Selkirk Central School District visit to connect with nature. Highlighted curriculum studies include identifying indigenous animals and ecosystems, sampling soil and surface water and discussing local historic settlements.

The 800-acre **Shalersville Sand and Gravel** in northeast Ohio, is Lafarge's first WHC certified site. The wildlife team continues to develop and expand their original projects — nest boxes, food plots, raptor perches, plantings and educational outreach. Hundreds of acres have been reclaimed on-site with more undergoing. Many areas include lakes that are now inhabited by blue gill, carp, snapping turtles and frogs. At least 100 acres near several lakes and wooded areas are maintained as food plots of clover, alfalfa and wheat to attract wild turkey and pheasant. The tree nursery supplies native species, such as blue spruce, purple beech, flowering juniper and weeping cherry trees, to enhance reclamation areas. A local youth group, the "Royal Rangers," participates in nest box construction and camps overnight on the reclaimed property. They discover first-hand how sand and gravel are excavated, and how the land used for mining is returned to a viable place for wildlife to thrive.

The **Whitehall Plant** in western Pennsylvania has over 400 acres of woodlands and open lake areas dedicated to wildlife, including native songbird and wood duck habitat. As part of a service project, Local Boy Scout Troop #35 helped plant employees build and install nest boxes. During the first annual "Bird Box Work Day" employees and their families visited to repair and install additional boxes. Bat boxes are planned for the future to help prevent the West Nile virus by reducing mosquitoes. Educational outreach is provided through a "Community Update Newsletter" distributed to approximately 9,000 residents. During the year, 10-20 tours on the site's program reach several hundred school children, groups and civic organizations.



Boy Scouts help install nesting boxes at the Presque Isle Quarry.



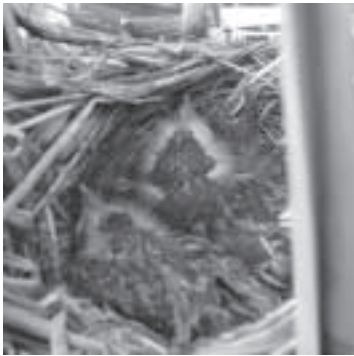
A tree swallow perches on a nest box at Shalersville Sand and Gravel.

Above and Beyond Environmental Performance

The **Douglasville Quarry**, located about 25 miles west of Atlanta, Georgia, began their environmental program as a charter member of the U.S. EPA's National Environmental Performance Track Program (PT), which recognizes facilities that voluntarily prioritize environment protection beyond current requirements. This inspired involvement with WHC, a PT network partner, in the restoration of natural resources at the quarry. The disappearance of natural habitat and erosion were initially tackled. Heavy rains created runoff that progressively eroded an entrance next to the scale house. To correct this problem, soil was applied creating a "dry stream bed" with river rock to channel the runoff. Volunteer quarry employees planted evergreens, grasses and flowering shrubs. The garden now attracts various butterflies and small animals. Numerous birds inhabit birdhouses that were placed among the new vegetation. To continue further, cleared areas will be replaced with native grass and wildflower meadows. Lafarge is "Partners in Education" with a local school connecting children and classroom teachers with corporate leaders. The students together with quarry employees add personal touches with environmental drawings of wildlife at the site. Looking ahead to future WHC certification, this ongoing program is forging a vital link between the facility and local community.

Local Partnerships for a Sustainable Future

Newly certified in 2004, the **Bath Cement Plant** is situated on the north shore of Lake Ontario in Canada. The property is comprised of a myriad of ecosystems, such as woodlands, open fields, lagoons and natural wetlands. A small wildlife team initially built nesting and bat boxes around a stormwater pond and lagoon helped by the local Boys and Girls Club of Ontario. New families within a monitoring season took up residence in boxes, such as red-breasted swallows and red-wing blackbirds. The area was augmented with taller grasses, shrubs and wildflowers to further entice nesting birds providing natural cover and food. A number of signs were installed advising people of the restoration program and not to disturb the nesting boxes. As the pond evolved into a natural habitat attracting wildlife, interest grew in the program inspiring a growing team to take on larger projects.



Two week old red-winged blackbird chicks (*Agelaius phoeniceus*) nest in a box.

A nearby farmer noticed the transformation of the pond and lagoon area asking if Lafarge could rehabilitate a few acres of his property to return the area to natural forest. In spring 2004, eighth grade students from Odessa Public School arrived at the site, shovels in hand, to plant more than 2,500 trees on a 6-acre stretch of retired farmland. Trees for Peace, a community tree-planting partnership, was instrumental in the restoration. The organization provides students with training through activities that promote stewardship for the environment. The area was also seeded with a wildlife foraging mix to control erosion and provide food for white-tailed deer and wild turkey. Part of the food plot was also seeded with wildflowers for a butterfly garden. Just a few weeks later, an array of colorful wildflowers bloomed drawing pollinators and insects.

The restoration program is a multi-year, long-term project to return retired stretches of farmland and other parcels of land to their natural state more suitable for wildlife. In 2005, an additional 5,000 trees will be planted in the open field areas. In the next five years, Lafarge intends to plant more than 30,000 trees and develop a forest management plan. The local chapter of the National Wild Turkey Federation helps build wood duck boxes and provides advice on local seed vendors and enhancing wildlife areas. The plant's lawns were seeded with a seed mix of yellow blossom sweet clover and birdfoot trefoil transforming the area into a green and lush carpet while acting as a buffer of vegetation and food plot for deer and other animals traveling between the forest and meadow to the stormwater pond.

Furthering community outreach, Ducks Unlimited Canada, Natural Resources Canada and local school teachers are developing a plan with the wildlife team to build an outdoor classroom with interpretive stations.

The plant is also working with the Ontario Ministry of Environment to cap and cover the cement kiln dust (CKD) landfill site restoring it to a natural habitat. After installing a cap, a layer of soil will be applied that will be seeded with grasses and wildflowers, promoting ecological reuse of the area and creating a sustainable habitat for local wildlife.



A restoration sign advises people of the native bird habitat.

Lafarge Activity

- 46 sites currently participate in WHC's *Wildlife at Work*SM program.
- 9,662 acres are managed for the benefit of wildlife habitat.
- 31 sites are active in the U.S. and Canada.
- 15 sites have WHC certified wildlife habitat programs.
- 6 sites received WHC certification in 2004.
- 10 sites have an active wildlife habitat program in Canada.
- 8 sites have been featured in the Corporate Homes for Wildlife Calendar since 1996.

The Wildlife Habitat Council (WHC) is a nonprofit, non-lobbying organization dedicated to increasing the quality and amount of wildlife habitat on corporate, private and public lands. WHC devotes its resources to building partnerships with corporations and conservation groups to create solutions that balance the demands of economic growth with the requirements of a healthy, biodiverse and sustainable environment. www.wildlifehc.org

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