

# Students pitch in with restoration

Students from Opawa's Seven Oaks School have joined Department of Conservation staff to restore their planned school site in Halswell to its natural, healthy state.

Founded three years ago by Macpac founder Bruce McIntyre, Seven Oaks is an independent school offering a new curriculum designed to prepare children for the changing economic, social and environmental challenges that await them when they leave school.

Currently based in Opawa, Seven Oaks is planning to move to a new site on the corner of Murphys Rd and Quaifes Rd in Halswell in 2014.

The 4 hectare site has three natural springs that are headwaters for the Halswell River, flowing eventually into Lake Ellesmere, Te Waihora.

Traditionally, the springs were part of a network that was an important habitat for many native plants, invertebrates and animals, and an important food source for local Maori.

The land has been farmed for more than 100 years and the springs used as watering holes for sheep and cattle. Erosion and fouling of the water is visibly evident.

In preparation for their move onto the new site in 2014, the intermediate class has partnered with the Department of Conservation and DoC ranger Cody Frewin, to undertake a restoration project to return the springs to their former state.

Seven Oaks principal Owen Arnst said the school was "very excited" about the project.

"So many of our children are environmentally aware and passionate about creating a better world," he said.

"Often they are unsure about what they can actually do or how



**Foul springs:** Seven Oaks School students survey the natural springs at the site of their planned school in Halswell as part of their environmental restoration project.

they can make a difference. This is a very real, meaningful and hands-on project that they can lead. There will be many empowering learning experiences as they restore the natural environment and record the positive differences they make along the way."

Last week, the children learned about the structure of a natural stream. They met ranger Frewin on site to collect base-line data for the beginning of a longitudinal study of the positive impact of their restoration project.

They collected information on current water quality and temperature, bank structure, plant cover and the presence of fish and

insect life. It was evident that the water quality is currently so low that only the most resilient of invertebrate life is able to survive. The students are excited by an opportunity to make a positive difference to the environment.

"I was horrified to see how muddy and smelly the spring is right now," said intermediate student Anna Carson.

"We need to take action now to stop any further damage to the wildlife."

Classmate Reuben Kinney said: "It is important to restore our water system to be more natural so that mudfish and mayflies can return to live in it again."



**Bug patrol:** Year 7 student Reuben Kinney checks the number and species of insects in water samples taken at the headwaters of the Halswell River.

The students' next step is to visit the DoC nursery at Motukarara to discover what plants are native to the Halswell area and learn about their propagation and care.

Following that, the children will develop a successional riparian planting plan and get under way with stage one planting. As they improve the habitat, they hope their spring system will become an

important part of the DoC project to bring the Canterbury Mudfish back from its critically endangered status.

Over the coming year and a half, the school also plans to plant hundreds of trees in preparation for moving to Halswell in 2014.

The school is inviting members of the public to join the development of the site.