

Oregon wildflowers blossom big in Native Garden

by Scott Johnson
Contributing Writer

Located between the Pauling buildings is a courtyard with an array of native plants, aptly named the native garden.

"A native plant is a plant species which grows naturally in an area, as opposed to an alien or plant that was introduced by man," said Richard Marx, curator of the Native Garden.

The Native Garden was built at the same time as the Pauling buildings to give representations of plant life that grows in Oregon, especially the Willamette Valley.

Students have been taking care of the garden since it was started. In the past weeds crept into the garden and started to take over.

Marx has somewhat rehabilitated the garden and spends a good amount of time working there.

"It just needed someone to

give it a little attention," Marx said.

The plants in the garden were collected from various trips, such as Malheur, a lot of them were started as seeds. Some of them were donated by people who were going to spray their property for agricultural reasons, many of the plants were also nursery grown.

However, the garden does not only contain plants. There is also a Geologic Time Scale, made of ceramic tiles. The space between each tile denotes a certain span of time. These tiles track time from the beginnings of the earth to the present day.

At this time the garden is showing it's best bloom ever, with a great variety of species.

"Especially our newest addition to the Native Garden, the Oregon Desert rock garden, is ablaze with color," Marx concluded. "I would like to encourage people to come and enjoy the garden."



One of several beds in the Native Garden, which right now has a nice display of wild lupine.
Photo by Scott Johnson



A sampling of the 'mutant' tomatoes being used to study the effects of cosmic radiation.
Photo by Scott Johnson

Space tomatoes invade CCC

by Richard Marx
Staff Writer

Some biology students are growing tomatoes from outer space here at Clackamas Community College.

Instructor Bob Misley and the students in his 200 biology series are experimenting with seeds sent to the college by NASA. These seeds are only a tiny sample of some twelve and one half million tomato seeds that had just spent six years in space.

"In 1984 seeds were placed into the Long Duration Exposure Facility (LDEF), a cylinder that was placed into orbit around the earth and was only recently retrieved" explained Misley. "Upon their return, they were then to be distributed to various schools for students ranging from fifth grade up to university level."

Tomato seeds were chosen because of their small seed size (allowing a greater number in a smaller space), their familiarity, and for their hardiness which allows their cultivation over the entire nation. They are all of one variety, the Rutgers California

Supreme. This is a non-hybrid type which varies relatively little, which makes detection of change due to their exposure in space easier.

"The main thing we are looking for is effects of cosmic radiation. Also weightlessness may cause growth changes as well," Misley said.

The seeds arrived here early in the year and were planted by the students in March. Along with those seeds that were in the LDEF, there were also seeds of the same variety that had not been sent into space. These will be used for a control group by which any unusual expression in the space tomatoes may be checked. They were all planted individually into the same commercial soil mix in four inch pots

"Special report forms were also sent for us to fill out. These also will give us a guideline of what unusual traits to watch for," Misley said.

When asked if they had observed anything unusual in the LDEF tomatoes, Misley replied that "the space seeds were slower

in germination than those of the control group." He also added that their growth seemed somewhat slower as well. The report forms are to be sent back to NASA no later than June 15th of this year.

When the students leave, some of the tomatoes will be taken home for the summer for continued growth. The rest will remain here where they will be set out in a garden here on campus. They will be carefully tended and watched. Any unusual characteristics which did not show earlier will be recorded.

Misley said that they anxiously await for fruiting, which should take about 85 optimum days from germination. Though none are expected to glow, there may be some variation in fruit pigmentation, size, and seed fertility.

"From the results of the experiments, we may have some better idea of how prolonged space travel affects not only plant life but even man himself as he explores the universe," Misley concluded.



The Science Department recently planted the Ginkgo biloba behind the Pauling buildings.
Photo by Scott Johnson

Living fossil tree planted in honor of Earth Day

by Angela Wilson
Feature Editor

In honor of Earth Day the Science Department planted a Ginkgo tree behind the Pauling buildings.

The Ginkgo tree, *Ginkgo biloba*, is a living fossil which dates back to the Permian Period 280 million years ago.

Ginkgo biloba belongs to the family Ginkgoaceae and of the 15 genera within the order Ginkgoales it is the only living representative, hence classifying it as a living fossil.

The Ginkgo tree is native to China and Japan and is also known to have once been native in different parts of North America. It was found planted around an-

cient temples in China and Japan.

"It had to be reintroduced into North America as an ornamental in the 1700's," said Bob Misley, science instructor.

The Ginkgo is a gymnosperm, which means that the seed is naked and not enclosed within a fruiting structure. It is also distantly related to the conifers or cone bearing trees.

The Ginkgo is planted in the wooded area directly behind the Pauling lab building.

"Being a deciduous tree, it was planted in a place where it's rich golden color will be shown to best advantage among the dark evergreen trees," Misley said. "In the fall it will be beautiful."

centimeters

16 (M)	17	18 (B)	19	20	21	22	23	24	25	26	27	28	29	30	
49.25	38.62	28.86	16.19	8.29	3.44	31.41	72.46	72.95	29.37	54.91	43.96	82.74	52.79	50.87	
-0.16	-0.18	0.54	-0.05	-0.81	-0.23	20.98	-24.45	16.83	13.06	-38.91	52.00	3.45	50.88	-27.17	
0.01	-0.04	0.60	0.73	0.19	0.49	-19.43	55.93	68.80	-49.49	30.77	30.01	81.29	-12.72	-29.46	
0.75	0.98	1.24	1.67	2.04	2.42	SN: P0013									Colors by Munsell Color Services Lab

Don Williams