### Professor Fears Destruction of 11,700-Year-Old Bushes

By CHARLES HILLINGER, Times Staff Writer

JOHNSON VALLEY, Calif.—What would you do if you discovered the oldest living thing on Earth and nobody cared?

That is botany professor Frank C. Vasek's dilemma.

"I'm just sick about this. It could be as important as the pyramids of Egypt. But it could also vanish with the snap of a finger," sighed Vasek, 55.

The University of California, Riverside, professor was standing in the middle of what he has identified as the world's oldest known living organism, a ring of creosote bushes.

#### Began With One Seed

He said the 70-foot-long, 25-foot-wide, irregular ellipse of scraggly desert shrubs began with one seed approximately 11,700 years ago.

"This outer ring of creosote bushes is comparable to the outer layer of living bark on a redwood tree," Vasek explained. "The inside wood has long since rotted away.

"The entire distance to the center of the creosote ring was at one time solid wood. The creosote bush starts with a center stem and grows outward with the inside dying and rotting away and the circle keeps getting bigger and bigger."

What concerns Vasek is that King Clone, the name given the 11,700-year-old ring of creosote bushes is on private undeveloped land on the Mojave Desert 150 miles northeast of Los Angeles.

The professor has tried to get the federal government, the state and San Bernardino County to buy the land on which King Clone is located and set it aside as a park "to protect the world's oldest living thing."

"But I can't get anybody interested. To the layman, King Clone is just another uninteresting, commonplace bunch of creosote bushes," Vasek lamented.

"To make matters worse if the subdividers don't destroy the oldest living thing on Earth, the motorcyclists and off-road vehicle people may well do it for them."

Allen Redden, 44, a Lucerne Valley real estate agent, is subdividing 320 acres of raw desert in Johnson Valley into 20-acre parcels.

King Clone is on one of those parcels.

"Maybe the professor is right. Maybe those bushes are the oldest living thing on Earth, but when you have millions of creosote growing all over the desert and they all look alike, it's hard to get too excited about it," Redden said.



PETERBELLE WHITEHT / Los Angeles Times

Botany professor Frank C. Vasek standing inside the ancient ring of creosote bushes.

Redden thinks someone will buy the 20 acres and bulldoze King Clone for a homesite, horse pasture or farm land.

Vasek winces at the thought.

"You know I hate to even stand inside King Clone. I have such a reverence for this champion of survival that has been in continuous existence in this harsh environment since the Wisconsin Ice Age.

"It is dear to my heart. It predates anything historical. I can't believe I haven't been able to interest someone to set aside, protect and preserve something twice as old as the oldest bristlecone pine (until now believed to be the oldest living thing), something three times as old as the redwoods."

Redden gave Vasek a year's option on the parcel priced at \$1,000 an acre. But the year was up Dec. 31.

"I don't have the \$20,000 and I could not find a government agency, private group or individual willing to spend that kind of money to save a clump of creosote," the professor said.

The find is well known to the scientific community. Vasek has had papers published about King Clone in the prestigious American Journal of Botany and other scientific publications.

Ten years ago, Vasek noted that in some areas of the desert creosote bushes grew in rings and he set out to learn if these clumps came from one seed or from several.

"Using isoenzymes as genetic markers, I discovered in King Clone all of the bushes in the ring had identical genotypes, all came from the same seed," Vasek explained.

Los Angeles Times

March 1, 1983

Creosote, like humans, can be "fingerprinted." The individual bushes outside the rings all have different isoenzyme combinations.

Creosote bushes, like trees, have a ring of growth each year. The living segments of King Clone are 100 to 150 years old. Vasek has radiocarbon-dated old wood dug from within the circle and extrapolated the age of the desert shrub.

He pinpointed creosote rings he has studied from aerial photographs. He has studied the bush throughout the Mojave Desert. The harsher the environment, the older the bush.

Vasek said the clonal clumps of creosote in Johnson Valley are the oldest he has discovered anywhere. Another ring half a mile from King Clone was found by Vasek to be only 9,500 years old.

## A Real Survivor Now Needs Help

We wrote in this space nine years ago that the world's oldest living organism is a bristlecone pine tree in the White Mountains north of Bishop.

We were wrong. The world's oldest living organism is a ring of creosote bushes in the Mojave Besert 150 miles northeast of Los Angeles.

But the 4,600-year-old bristlecone, safe in its mountain retreat, may yet reclaim the title because the 11,700-year-old creosote bushes are in imminent peril from bulldozers. The plant, incidentally, is not the source of creosote, but it does smell strongly of that pungent wood preservative—particularly after a rain.

The scraggly desert shrubs spread out in a 70-foot-long ellipsis from the long-dead original stem, from which new rootings have grown over the eons.

The creosotes are on 20 acres of private property that are part of a subdivision in Johnson Valley. Their best hope of survival is that their discoverer, botany professor Frank C. Vasek of the University of California at Riverside, can find a public or private agency that will buy the property and keep it out of the hands of developers.

Vasek tried to raise the necessary \$20,000 himself, but his purchase option ran out the first of this year. He said that he could find no one "willing to spend that kind of money to save a clump of creosote." His

major difficulty is that there are hordes of younger creosote bushes growing in the area, and they all look pretty much alike.

But there has been more interest in saving the patriarch—Vasek calls it King Clone—since The Times' Charles Hillinger wrote last week of his visit to the site with the professor. One of our readers sent Vasek a check for \$1,000, and another told him that he had 20 acres in the Nevada desert that he was willing to trade for the 20 acres in the Mojave.

The plants will continue to be in danger, however, until a buyer is found and a fence built around the site. Residential or commercial development is a future threat, but rampaging motorcycles and off-road vehicles are a continuing menace.

There is no challenge to Vasek's claim that the bushes are the oldest known living organism. Yet he describes his estimate of 11,700 years as conservative; and he and his student assistants suspect that the bushes may be twice that old.

In comparison, the bristlecone pine at 4,600 years and the giant Sequoias at 3,000 to 4,000 years are mere sanlings.

Vasek professes "a reverence for this champion of survival that has been in continuous existence in this harsh environment since the Wisconsin Ice Age." We hope that the professor can find others who share his reverence.

THE SUNDAY TIMES, 6 MARCH 1983

London

# Saving Third World's green gold

AFTER five years of off-stage manoeuvring, a meeting opens in Geneva on March 14 which holds out the first realistic prospect of saving the world's tropical rainforests from destruction.

The rain-forests are the "green gold" of the Third World, providing 20 countries with their main export earnings. But instead of being husbanded as a precious renewable resource, they are being hacked away so fast that each year an area the size of the Netherlands is lost. At the present rate, they will have vanished in 85 years.

The earth's ecological system would not survive their destruction: the forests are its lings. Already, climatic changes are apparent in Malaysia and Indonesia, whih produce 65 per cent of the world's tropical timber exports.

One of the multiple pressures on the forests is that rapid population growth has greatly increased "slash and burn" cultivation, the means of survival for 300 million landless peasants and tribesmen. But the chief danger comes from the West's insatiable appetite for veneers and rare

ENVIRONMENT

Rosemary Righter on new moves to conserve trees

hardwoods – the pianos, mahogany coffeetables and teak floors which are among the end-products of a trade in tropical hardwoods now worth some \$7,000 million a year.

Japan, the world's leading consumer, saw the danger ahead five years ago after Thailand, with its huge jungles, ceased to be a net exporter. Logging concessions for Japanese multinational companies were drying up, and their large timber-processing industries were threatened. Japan went to Unctad (the United Nations Conference on Trade and Development) to propose a new deal for producers and consumers.

The result is this month's conference, aimed at setting up an International Tropical Timber Organisation to manage the trade. Unctad is handling it with kid gloves to avoid American accusations that this is just another UN bid to tamper with

the magic of the market-place. No effort is being made to establish prices. Initially, the new organisation would have four main tasks:

Reforestation and forest management: to balance logging, reforestation must be increased fivefold. The forest must also be more efficiently exploited. At present, of about 300 potentially commercial tree species, a mere 20 hardwoods account for 80 per cent of the export trade.

Research and development: it is still not known how to propagate many of the most valuable trees.

Better market intelligence: for instance, giving Third World exporters more help with contacting buyers and more information about possible uses of tree species now neglected commercially.

Raising the earnings of exporters by encouraging them to process more

The hope in Geneva is that the new organisation can be set up before the end of this year. Speed is certainly of the essence: the Ivory Coast has already lost two-thirds of its forests and Gambia 96 per cent.

#### Ses Angeles Street

February 26, 1983/

### Endangered Orchids Halt Work on Highway Expansion in Texas

BRYAN, Tex. (4)—State officials have halted work on a highway interchange until engineers decide what to the about nine orchids added to the endangered species list last year.

The nine orchids, called Navasota Ladies Tresses, represent about 10% of that species known to exist, said Jim Johnson, acting head of the endangered species section of the U.S. Department of the Interior in Albuquerque, N.M.

The flowers grow near a bridge that will be affected by a project to convert Texas Highway 6 into a four-lane thoroughfare between Bryan and Navasota. Johnson said it may be possible to shift the site of the bridge a few hundred feet in either direction to skirt the hill where the orchids bloom for nine days every October.