# Letters

## Displaced Argentine Scientists

All of us must be aware of the recent events in Argentina after the overthrow of President Illia, of the closing of the universities and their subsequent reopening under stringent government control, of the repressive measures taken against faculty and students, of the intimidation, terror, and actual physical beatings exerted upon university people by the state police (News and Comment, 16 Sept., p. 1362). As a result, many of the faculty of the National University of Buenos Aires, particularly those in the science faculties, have been literally forced to resign in protest against the anti-intellectual measures of the new Argentine government. These brave people must be helped, for they are without positions, and without hope for the near future. Many, in order to support themselves and their families, are being forced to look for positions outside Argentina. The American scientific community is the most affluent in the world. It behooves us, at least from a sense of duty to international science, to take the lead in giving a much-needed helping hand to those fellow scientists in Argentina who may wish to leave their country for various periods of time to find positions in this country.

Those faculty members who are well known, even famous, in their various fields will not have great difficulty in finding positions elsewhere. However, those who are not well known, young people who have just completed their doctorates, persons working for a doctorate degree and who have the title of *Licenciado,* equivalent to a masters degree—these are the people who must be helped. There are dozens of people in the fields of pure and applied mathematics, theoretical and experimental physics, chemistry, biology, and geology who could pursue their scientific work in universities and institutions in this country. I suggest that those who may have openings write to Professor Mischa Cotlar, Sarandi 1420, Buenos Aires, Argentina. Cotlar, an eminent mathematician who has been on the faculty of the University of Chicago, Washington University, and Dartmouth College, is acting as a "clearing house," as a go-between for those who are being forced to leave or who wish to leave, and those who have facilities to accept them. He can supply all the necessary information concerning the Argentine scientists. As scientists, we transcend the boundaries of nationality, of creed, of race, and religion. When barriers are being erected, we can break them down, for the scientific community is, by far, the one community that can speak for a truly universal community of mankind.

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## How Many Redwoods?

"The coast redwoods: struggle over national park proposals" (News and Comment, 30 Sept. p. 1620) is disappointing because it completely ignores, as the several contestants virtually have, the question that should be answered on scientific grounds before political and economic forces come into play. This is: *how large an area is required to preserve and display for posterity a single tree species in the glory of its optimum development?* I have seen no convincing argument to the effect that the 50,000 acres (20,250 hectares) of virgin redwoods now in state parks constitute inadequate total area. At the same time, few people would oppose park status for certain other superlative stands such as that which contains the tallest tree in the world. But again, how do we arrive at the number of acres needed?

The relevant considerations are (i) ability to maintain a sample of virgin redwood forest as a viable biological community, and (ii) opportunity to display and interpret the forest meaningfully to the people of the world. Maintaining a biological community undisturbed would appear to require less area in the much-dissected topography of redwood country than in most places. What happens in one small drainage is unlikely to have much effect on forest conditions in the next because of the steep intervening ridge. Even upstream conditions, within reason, appear not to be a matter of too much concern. Abnormal winter storms twice in the past 5 years caused serious damage in unlogged as well as logged drainages, a fact that is largely ignored by those who aver that the proposed park must include an entire drainage. In this connection it is appropriate to note that the few acres of second-growth redwoods in Paul M. Dimmick State Park withstood a torrent more than 20 feet (6 m) deep. Perhaps the 21,540 acres now in state parks within the two areas proposed for the national park already are an adequate sample biologically.

As for displaying and interpreting the redwoods, I have no basis for suggesting either optimum acreage or optimum location. However, there may be merit in the thought that 28 state parks scattered over a 430-mile (692 km) north-south range afford better opportunities than a single national park of any feasible size. Indeed, if all the state redwood parks are as well administered as the one I have visited appeared to be, one could question the need for a national park. But that is beyond the intended scope of this letter.

I cannot close without commenting on the tremendous vitality of the redwood, individually and collectively. "Save-the-Redwoods" implies a need to preserve a species from extinction; nothing could be farther from the truth. I have seen no other conifer species recover like redwood from logging, fire, and other disturbance. I never expect to see any other species produce trees 4 feet in diameter and 200 feet tall from what was a potato patch among blackened stumps less than 80 years ago. Some virgin stands do need saving; the species itself is safe.

The point of this letter is that I think *Science* could do better than merely report, with reasonable impartiality, the political pulling and hauling involved in settling a question like that of the proposed redwood national park. *Science* should point out the scientific questions to be resolved, whether the AAAS takes an official stand or not.

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