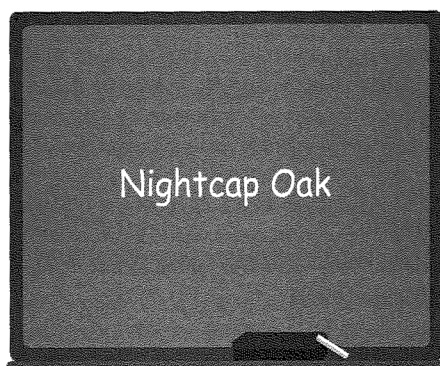


Professor

OK, I have an interesting plant species to discuss with you today. Uh, it's a species of a very rare tree that grows in Australia—*Eidothea hardeniana*—but it's better known as the Nightcap Oak.



Now, it was discovered only very recently, just a few years ago. Uh, it remained hidden for so long because it's so rare, there're only about, oh, two hundred of 'em in existence. They grow in a rain forest, in a mountain range in the north part of New South Wales, which is, uh, a state in Australia. So just two hundred individual trees in all.

Now, another interesting thing about the Nightcap Oak is that it is . . . it represents . . . a-a very old . . . *type*, a kind of a tree that grew . . . a hundred million years ago. Uh, we found fossils that old that bear a remarkable resemblance to the tree. So, it's a *primitive* tree, a living fossil, you might say. It's a relic from earlier times, and it has survived all these years without much change. And . . . it-it's probably a kind of tree from which other trees that grow in Australia today evolved. Just-just to give you an idea of what we're talking about, here's a picture of the leaves of the tree and its flowers.



I dunno how well you can see the flowers; they're those little clusters sitting at the base of the leaves.

OK, what have we tried to find out about the tree since we've discovered it? Hmm, well, how . . . why is . . . is it so rare is one of the first questions. Uh, how is it, uh, how does it reproduce, is another question. Uh, maybe those two questions are actually related? Jim.

Male student

Hmm, I dunno, but I can imagine that . . . for instance . . . uh, seed dispersal might be a factor—I mean, if the, uh, y'know if the seeds cannot really disperse in a wide area then you know the tree may not, uh, *colonize* new areas, it-it can't spread from the area where it's growing.

Professor

Right, that's—that's actually a very good answer. Uh, of course, you might think there might not be many areas where the tree could spread *into*, uh, because, uh, well it's—it's very specialized in terms of the habitat. But that's not really the case here, uh, the-the suitable habitat-habitat that is the actual rain forest is much larger than-than the few hectares where the Nightcap Oak grows. Now, this tree is a flowering tree as I showed you, uh, uh, it-it produces a fruit, much like a plum, on the inside there's a seed with a hard shell. Uh, it-it appears that the shell has to crack open or break down somewhat to allow the seed to soak up water. If the Nightcap Oak remains, if their seeds remain locked inside their shell, they will not germinate. Now actually the seeds, uh, they don't retain the power to germinate for very long, maybe two years, so there's actually quite a short window of opportunity for the seed to germinate. So the shell somehow has to be broken down before this, uh, germination ability expires. And-and then there's a kind of rat that likes to feed on the seeds as well. So, given all these limitations, not many seeds that the tree produces will actually germinate. So this is a possible explanation for why the tree does not spread. It doesn't necessarily explain how it *became* so rare but it explains why it doesn't increase.

OK, so it seems to be the case that this species, uh this Nightcap Oak, is not very good at spreading. However, it seems, though we can't be sure, that it's very good at *persisting* as a population. Uh, uh, we, uh, there-there're some indications to suggest that the population of the Nightcap Oak has not declined over the last, uh, y'know, many hundreds of years. So, it's stayed quite stable; it-it's not a remnant of some huge population that has dwindled in the last few hundred years for some reason. It's not *necessarily* a species in retreat. OK, so it cannot spread very well but it's good at maintaining itself. It's rare but it's not disappearing. OK, the next thing we might wanna ask about a plant like that is what chances does it have to survive into the future. Let's look at that.

TRACK 46 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Professor

OK, what have we tried to find out about the tree since we've discovered it? Hmm, well, how . . . why is . . . is it so rare is one of the first questions. Uh, how is it, uh, how does it reproduce, is another question. Uh, maybe those two questions are actually related?

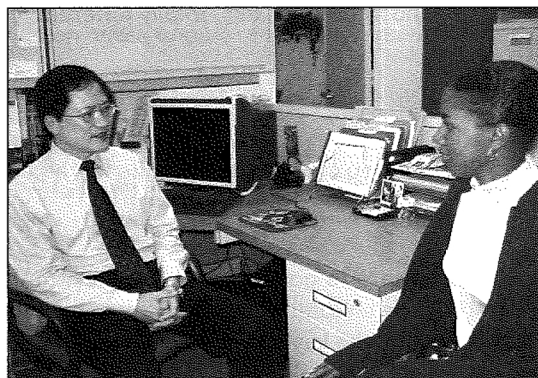
Narrator

Why does the professor say this:

Professor

Maybe those two questions are actually related?

TRACK 47 TRANSCRIPT



Narrator

Listen to a conversation between a student and a professor.

Student

Professor Martin?

Professor

Hi, Lisa—what can I do for you?

Student

Well, I've been thinking about, you know, what you were saying in class last week? About how we shouldn't wait until the last minute to find an idea and get started working on our term paper?

Professor

Good, good. And have you come up with anything?

Student

Well, yeah, sort of—see, I've never had a linguistics class before, so I was sort of . . . I mean, I was looking over the course description, and a lot of the stuff you've described there, I just don't know what it's talking about, you know? Or what it means. But there was one thing that really did jump out at me . . .

Professor

Yes . . .?

Student

The section on dialects? 'Cause, like, that's the kind of thing that's always sort of intrigued me, you know?

Professor

Well, that's certainly an *interesting* topic, but you may not realize, I mean, the *scope* . . .

Student

Well, especially now, 'cause I've got, like, *one* roommate who's from the South, and *another* one from New York, and we all talk, like, *totally* different, you know?

Professor

Yes, I understand, but . . .

Student

But then I was noticing, like, we don't really get into this till the end of the semester, you know? So I . . .

Professor

So you want some pointers where to go for information on the subject? Well, you could always *start* by reading the chapter in the book on sociolinguistics; that would give you a basic understanding of the key issues involved here.

Student

Yeah, that's what I thought! So I started reading the chapter, you know—about how everyone speaks some dialect of their language? And I'm wondering, like, well, how do we even manage to understand each other at all?

Professor

Ah! Yes, an interesting question. You see . . .

Student

So then I read the part about "dialect accommodation"—you know, the idea that people tend to adapt their speaking to make it closer to the speech of whoever they're talking to. And I'm thinking, yeah, I do that when I talk with my roommates! And without even thinking about it or anything, you know?

Professor

OK, all right—"dialect accommodation" is a more manageable sort of topic . . .

Student

So I was thinking, like, I wonder just how much other people do the same thing? I mean, there's students here from all over the place; does everyone change the way they talk to some degree, depending on who they're talking to?

Professor

You'd be surprised!

Student

So, anyway, my question is, do you think it'd be OK if I did a project like that for my term paper? You know, find students from different parts of the country, record them talking to each other in different combinations, report on how they accommodate their speech or not, that kind of thing?

Professor

Tell you what, Lisa: Write me up a short proposal for this project—how you're going to carry out the experiment and everything, a-a design plan—and I think this'll work out just fine!

TRACK 48 TRANSCRIPT

Narrator

Listen again to part of the conversation. Then answer the question.

Student

The section on dialects? 'Cause, like, that's the kind of thing that's always sort of intrigued me, you know?

Professor

Well, that's certainly an *interesting* topic, but you may not realize, I mean, the *scope* . . .

Narrator

What can be inferred about the professor when he says this:

Professor

Well, that's certainly an *interesting* topic, but you may not realize, I mean, the *scope* . . .