Oral History Program

**OH-276 Box** # 14

# **Oral History Program**

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# **ROBERT WINGET**

**BYU - Hawaii** 

### BRIGHAM YOUNG UNIVERSITY - HAWAII CAMPUS Behavioral and Social Sciences Division Laie, Hawaii 96762

### ORAL HISTORY PROGRAM

| HARRATOR:  | Robert N. Winget                             |
|------------|--|
| INTERVIEW  | NO.: 0H-276                                  |
| DATE OF IN | VTERVIEW: February 18, 1986                  |
| INTERVIEW  | ER:Brian R. Winget                           |
| SUBJECT:   | The Amendment to' the Endangered Species Act |

### BRIGHAM YOUNG UNIVERSITY - HAWAII CAMPUS BEHAVIORAL AND SOCIAL SCIENCES DIVISION Late, Hawaii 96762

## ORAL HISTORY PROGRAM

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#### INTRODUCTION

Dr. Robert N. Winget was born and raised in a small southern Utah town. While growing up, he attended elementary, junior high, and eventually graduated from South Sevier High School with a strong background in science.

Dr. Winget attended University of Utah for about a year and then went on an L.D.S. mission. He returned two years later where he again continued his education at University of Utah.

Dr. Winget achieved a Bachelors, Masters and eventually a Ph.D. in the area of biological science. After the completion of college, Dr. Winget took on a position at Brigham Young University in Provo, Utah. He was mainly involved in research where he gained a broad knowledge of species and the dangers involved in uncontrolled use of the land by man. During this time, he was exposed to many incidents whre the Endangered Species Act was being abused. As a result of his experience and knowledge, he developed a sense of involvement towards government and environmental protection.

Dr. Winget was involved in the invention of the amendment to the Endangered Species Act. The following interview is an outline of Dr. Winget's involvement in the amendment and reasons behind his actions and feelings.

> Brian Winget Student

#### NOTE

This interview was conducted by a student as part of a class assignment in History 121, History of the U.S. Since 1865. In most cases the student selected the topic and narrator and also did the transcribing and some of the editing. The auditing was done by a classmate, Tiffany Lambert. Brian Winget did the final typing. The secretary of our Oral History Program completed the editing and transcript assembly.

Because we try to get the transcripts into the hands of the participating students and narrators as quickly as possible there may be errors that otherwise would not be permitted. We usually try to clarify statements that may be confusing; in these interviews, however, unclear statements may possibly be found. Our apologies for presenting a less-thanperfect transcript, but this does enable us to get interviews that might otherwise be lost.

For most of the students this was their first interview and while they were surprised at how much work was involved they were pleased with the results of learning not only about the subject matter covered but the development of a skill at the same time.

> Kenneth W. Baldridge, Director Oral History Program, BYU-Hawaii

Laie, Hawaii 18 June 1986

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#### BRIAN R. WINGET

FEB. 18, 1986

AMENDMENT TO THE ENDANGERED SPECIES ACT Side A

[000] BW: My name is Brian Winget. The date is Feb. 18,1986. I am to interview Dr. Robert N. Winget on about the topic of Endangered Species Act in which he wrote the amendment. Before getting started, I would like to find out a little bit about you: where you were born, where you grew up, and what schools you attended and basically your personal outline.

I was born in Utah--central southern Utah. I spent the RW: to Monroe first eighteen years of my life there. I went Elementary, and Junior High and South Sevier High School. During that time I enjoyed science very much. In fact I spent a summer the University of Utah at a science institute and [it] at introduced me to a lot of science areas. And that was what decided me on going to The University of Utah for college; college studies. I went there for one year and then I went to the Gulf States mission, an L.D.S. mission for two years where I lot of different environments, eco~ exposed to was a systems,[and] different peoples. I came back to the University of Utah--got a bachelor's degree in zoology,[and] entomology in 1967, a masters degree in 1968 in entomology and parasitology. 1 received my Ph.D. in 1970 in related fields of biological sciences especially related to the public health areas. Not in very much time I specialized in environmental issues. I was very much aware of the dangers of chemicals in the environment and did my masters and doctoral thesis in non-chemical insect control-how to control insects without using insecticides. So, I think, [strongly with emphasis], what we can do in the world without poisoning everything.

BW: What is the Endangered Species Act?; Why was it created, and possibly what were some on the problems that the Act was designed to overcome?

Because the population has increased, in America and the RW: rest of the world, there has been an increased demand for natural resources. We have more people that want to buy cars, we have to have more mines to mine the metals--more oil wells to get the materials for plastics for the other materials in the car plus the fuels to run them and, of course, you come up with a lot support needs then too. You need coal in order to process your metals; you need electricity; you need glass; you need manufacturing [100] plants of all kinds. And when the model A and model T Fords were being built, they had big bulletin boards along the highway showing factories spewing smoke out into the air and that was a big sign of progress and success. Everybody really thought that [it] was something to have a hundred foot high smoke stack There have been a lot bellowing smoke out into the environment.

of jobs--it meant that each of us could have a car', each of us could have a refrigerator', each of us could have a camera; each of us could have everything we needed. But then, as more and more of these factories sprung up--of course the dollar became an important part and industry wanted to get their lion's share, built as many factories and dig as many mines as possible and we started to overload the environment. And scientists started to see species disappearing. In nature we've always had new species being created and old species dying off, from the time of the beginning of the earth, billions of years ago. The dinosaurs are good examples of that.

But we [scientists] noticed that the rate of extinction was increasing while the rate of creation was not. So it became a concern to scientists wondering what would be the impact on the earth if we started loosing a lot of species. In the past when the environment has changed for example, when we go into an ice age and then we come back out and the environment changes significantly and we have enough variety of animals and plants, there are always some that can survive. There is always some species that can adapt. But what happens if we kill off a lot of species and then we have an environmental change again? Will life as we know it be able to adapt and continue on or will we end up with a real disaster, a loss of life? Especially in food crops, this became very evident. We had the potato famine in Ireland where [thousands] of people died because they had planted only one variety of potatoes and a disease organism adapted to attack that particular variety of potato and so it wiped out all of them. If Ireland had many, many, more types of potatoes, they would have only lost a small part of their crop.

In the 1970's, we had the same thing happen in the corn belt in the United States. Only one or two varieties of corn made up ninety nine percent of the crop. We had the old "blight" come through there--the rust and it just wiped out the U.S.'s corn crop. We lost over half of our entire corn crop. And it caused a real economic crisis in this country because we were depending on agriculture to keep a balance of payments. These things, and the passenger pigeon being lost and the whooping crane being threatened and the grizzly bear being threatened or becoming extinct and the buffalo almost wiped out, even our golden eagle, the bald eagle both them being threatened in this country, becoming wiped out, [made] a lot of people real excited. The peregrine falcon for example, started having D.D.T. [Dichlorodiphenyl-trichloroethane] show up in their eggs and the shells were too thin and the chicks were all dying before the eggs would hatch. Even up in the Arctic Circle, we had D.D.T. showing up in the food chain so it became very evident that we were threatening life on the earth as we know it.

So scientists, in conjunction with legislation, proposed an Endangered Species Act in that whenever a species became endangered--that it could be listed with the government, with the

U.S. Fish and Wildlife Service, and then that species from that point on was protected. That means that we could not build any roads or put any dams on any rivers, power-lines, power plants, or any development of the land or water that would have any negative impact at all on that species from that time forward, without first doing an environmental study, filing an impact statement and getting approval that this project would not endanger in any way such species.

This was a very positive thing at first, then some people started misusing it. Whenever a group, like the Audubon Society, [200] did not want a reservoir for water for a new city or an enlargement of a city, they would go in and find some bird or some plant or some animal and it may just be a population of a species and not even a whole species but they would name it as species and they would declare it as threatened. Whether they could prove that it was threatened or not, they would declare it threatened and according to the law, it would be listed and the That is how it was used through the project would be halted. 1960's into the early 1970's ; this was happening. A list of projects were being shut down. Telico Dam, for example, nearly a billion dollars had been spent and somebody said that the little snail darter was endangered and they called it a separate species which it is not, never was, never will be, but it was listed as a species and that project was stopped, putting many people out of work--stopping a project that supposedly was important--so there was a lot of power in that act.

BW: You talk about problems that were created by the Endangered Species Act. Were there problems that were overcome by it? Also, was it too late for some species; were there actually cases of species being totally wiped out before the Act was passed?

Well, the California Condor looks like it is on it's way RN: out--there are only about twelve of them left in the world. Just last month, I read about several of them in captivity. They were doing some experiment and they accidentally killed a couple more and destroyed some of the eggs. So the number is down probably below what will breed to or recover once, those are dead, it's Some species, it's too late for. The peregren falcon all over. is now on it's way back. D.D.T. has been banned in the United States and in most of the world now, it no longer shows up in the food chain except only rarely. The bald eagle is now increasing in many areas. The grizzly bear seems to be stabilizing although in many of our states, it will disappear and become extinct in a It is still protected in some of the northern, lot of states. north western areas and up in Alaska it will have a home. The has been saved and a new whooping crane, it looks like that viable population there looks real good.

There have been a lot of species. The desert pup fish was saved from an irrigation project and that species of fish is no longer endangered. Colorado squaw fish, it looks like the reservoir is already in place on the Colorado river. There is a big threat there and they are not going to be taken out and they still may become extinct. It may be too late for that one. Although, I don't know what kind of an impact that will have, but there are other species that have taken its place because of the colder, clearer waters of the reservoir on the Colorado River. We have some species that it was too late for and others have been saved.

BW: So, the passenger pigeon and the great auk, did they become extinct as a result of man?

RW: Yes, both of those were killed off by man.

BW: Getting back to the problems created by The Endangered Species Act, is there something to do with genes in a species that is beneficiary to man that if they did become extinct it would create problems for us in scientific research?

RW: We never really know the value of the species. In plants we're finding out more and more of the extreme value of maintaining what we call the diversified gene-pool. As I mentioned before, some of the crops have been threatened and wiped out by diseases. Well, in the corn for example, corn started out as small grain, grass plants. It's a grass, it's a monocot and the original corn only grows a couple feet tall and it will have several shoots instead of just the one corn stalk that you see out in the field and the ears are only about an inch long and smaller around than your little finger. You think, well, what good is that? What value is there in that? you can't eat it, it would take acres and acres to grow enough to feed a family and yet within that plant is the result of millions of years of evolution.

That plant has been exposed to diseases of all kinds, environmental changes of all kinds, and it has survived. So within that gene-pool of that plant are the genes to overcome disease; the genes to overcome drought; the genes to overcome cold and so forth. By cross-breeding that old one--there are many, many species of different kinds of corn and wild ones-- and by interbreeding those with our large, productive agricultural corn, we can pick up these genes for disease resistance. When a new disease pops up that it is killing off our Super Sweet #10, for example, we can cross that variety with other varieties and pick up a gene that makes it resistant to that disease and so we [300] have a Super Sweet #11. And a new disease or new insect comes along and attacks that and we cross it with some others and we have a Super Sweet #12. And someday we may have a Super Sweet #50, who knows how far it is going to go, but corn, we have to come up a new variety about every five years to keep ahead of the disease. You can't come up with a new species or a new variety without having the old ones to cross with to get the genetic material with. You have to have somewhere to get that.

It's the same with many of the other crops. Sugar cane, it takes almost five years to develop a new variety of sugar cane and only one in maybe fifty or so are viable ones that you want to save. So it's a constant struggle to keep up with demands, keep production high and yet keep desirable characteristics in your sugar cane. We spend in Hawaii some six to seven million a year in research in developing new varieties and improving sugar cane.

In animals, the same is true there with our livestock with our selective breedings and that you can do some selection just one variety from one generation to the next. Remember the Texas Long-horn. It was a very tough animal but it didn't produce real well and you didn't get a lot of poundage on it so you had an animal that was stringy and tough eating and didn't have a lot of weight on. But now by crossing it with the Hereford we have an animal that can take the cold winters because it has the steadiness of Long-horn and yet it has the production of our good domestic varieties of beef and now we've crossed many,many types.

In fact, cattle breeders have a catalog out that you can select the bull semen for your cows in this catalog depending on how tall you want your calves, how heavy you want them. If you want to have cows, dairy cows, you can select that bull by the amount of gallons of milk a day his off-spring has been known to You can select them by produce with various other crosses. height of the hind legs so that they are easier to fit milking machines on to the udders and wash them off when you are going to milk them. It also seems to keep the teats and udders out of the mud and in the barn-yard so that they don't get diseased or infected as easily so you just pick a longer legged one and yet you can pick it by the length of the neck, the width of the shoulders, the ability of the back to hold up the weight, you can select all of those things right out of a catalog just like you would for buying screws, nuts, bolts, out of a Sear's catalog only you do it for bulls. So that genetic pool is really important to us, yes.

BW: I noticed you were talking about plants, I didn't realize that plants are a species, but I guess that they are. The Endangered Species Act created a list of all the species that are endangered. What are the requirements or conditions that have to be met for a species to get on the list of endangered species?

RW: The original Act, it said that you had to scientifically show that they were endangered or threatened. And yet, the information gathered by a lot of people was not scientific, it wasn't reviewed and it wasn't challenged or questioned and the list became so cumbersome. In fact, the last list I saw was some twenty, thirty pages long and it must have been three or four single spaced columns per page of just species that have been listed as endangered in the U.S. Included in that list were

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mosquitos, snails, beetles, and flies, frogs, and toads, lizards, you name it they're on there.

The danger was that once a species was listed, we had to then prepare or form a recovery team under the law. Whereas this team, funded by the government, would do studies on the species, the population, their distribution, their needs and then propose or prepare a plan of action to build their numbers up and their distribution and ranges up so that they would not be endangered Of course, this, when your list gets large there is no any more. way that we have the resources to do that and so this species would sit there without being reviewed or studied and anybody who wanted to use the resources that were included in the range of that species would either have to fund all that themselves which was very costly and time consuming and took many years or they would just have to wait and not be able to use the land or the water until someone got around to doing it.

There was a real backlog and people, like I say, were just proposing species just to stop projects and they knew that nothing could be done for many, many years; so they would shut down literally thousands of projects all across the country that way, many of our constructions. Some of them were valid cases though, some of the projects should have been shut down.

I worked on a project in Idaho on the Warm River for a hydro-electric plant. Utah Power and Light was proposing putting in a diversion dam in and building a hydro plant on this beautiful, wild river running through moose, elk, and grizzly bear habitat; it was just gorgeous just outside the Yellowstone National Park. It was one of the most beautiful rivers I have I was working for Utah Power and Light and worked ever seen. with them for many, many years and yet my first recommendation after the first few months of study was to drop the study because they would never get it approved. They cancelled the project and some of them, like I say, should be stopped. Others, like some of the coal mines in areas that are not unique, with species that were not special, they are species that are widespread and where we were having an energy shortage for those few years back in the late 70's, early 60's it was hard to justify shutting down a lot of those projects by naming some species that was really not a species or it wasn't threatened. Especially using some snail or a mosquito or something.

BW: We have discussed the problems that were not created by the Endangered Species Act but were not overcome by the Endangered Species Act. An amendment was written in which you specific role. Will you please tell me how you became involved in that and possibly what you did to assist in that?

[400]

N: Well, I was involved in a project on the Virgin River where St.George needed extra water and also California or Edison power

proposing a power plant to be constructed in the four corners area also. In the Virgin River is a little fish called the woundfin minnow and it is found nowhere else in the world but the Virgin River. Some people didn't want St.George to grow, they wanted to keep it small and they didn't want the power project either and so the woundfin was listed on the endangered species list to stop the project. The Fish and Wildlife Service got on the ball and established a woundfin recovery team to study this. These men, forming this team, got together and supposedly did a scientific study on the woundfin minnow.

The City of St.George hired me and some other people to come in and see what we could do about getting approval to use some of the water. They weren't going to use all of it; they were just going to use the high flows of the winter and put them in a off stream reservoir in another valley and then use the water for the cities use during the dry months. We started our study and we asked the recovery team and these people what the flows would be required for this minnow; what would you have to have in the stream for it to survive and do well. They came up with a value, I think the first one was sixty c.f.s. or something like this. And we asked them what kind of habitat the woundfin required and they said that it needs less than one foot of depth over sandy substrate in order to feed and breed and needs water velocity of less than one foot per second. We did a survey of the stream and we found out that we could give them everything that they wanted. We could provide the flows and still have the project and still keep the woundfin minnow alive and well according to what they said.

Well, they came back and said, Well, we missed calculated and now we think the woundfin minnow needs eighty c.f.s. C.F.S. is cubic feet per second. Now they went from sixty to eighty cubic feet per second it needed more water left in the river. We went back and recalculated again and came up and said, "OK we can give you the eighty feet per second, that's fine." Then they said, "Well, we need ninety c.f.s." Now they hadn't done any more studies; these were the original studies but now they were up to ninety from sixty; they had changed it twice. We recalculated again and we said, "Well, we will give you the ninety" and then they said, "Well, we have to have a hundred" and so you knew they were not basing any of their facts on scientific studies. So, we went and asked them, what velocities and depths do they really need and they went out and did some more surveys and told us what they really needed.

So we did a hydrological survey of the river and found out only forty cubic feet per second would provide that need for the fish in the river instead of the hundred. And so they said "Well, we made a mistake" and so they increased the depths and the velocities arbitrarily with no more surveys. And this went on until finally they got up to one hundred and ten cubic feet per second they said was needed. Then we said, "Alright, we will give you the hundred and ten and then they said, "Well, we have to have critical habitat preserve for this woundfin and so they then got into the critical habitat which was another portion of the Act if it [the habitat] is declared critical, then you cannot impact it at all whether it is shown to be beneficial or not. So then they shut down the project because of critical habitat.

In our surveys we found out that forty two miles of stream that they had declared as critical habitat for the fish was dry six months every year so what they were saying is that a dry river bed was declared critical for the woundfin minnow. This became very evident now that something was wrong with the Act the way it was written, that it was not an Act that you could go in and justly do scientific surveys and then have a ruling made on it, and other people could abuse it against any project that they wanted to whether it was a good project or not.

The Environmental Protection Act states that you are supposed to do an analysis with the costs and benefits and if the benefits outweigh the costs then the project is supposed to be approved. If the costs are greater than the benefits, then it is supposed to be modified or rejected. And so the normal process of evaluating a project was not valid under the old Endangered Species Act. So, I started writing letters to congressmen and being known as an activist. In fact, President Carter invited me back to the Whitehouse for a consumer awareness conference, a personal invitation from him because of the letters I had written.

I got a hold of some of my congressmen, hold of representative "gun" McKay, "Gun" McKay was working with congressmen back in Oregon and one in Missouri. They were trying to come up with some amendment to the Endangered Species Act and so they asked me what I would recommend doing. I helped them prepare an amendment that we could overcome some of these problems.

This amendment basically stated that a species could be proposed to go on the Endangered Species Act and critical habitat could also be proposed for listing and that any use of that habitat or any endangerment of that species would have to be stopped allowing the regulatory agencies or any environmental groups or any one concerned eighteen months to gather information to show why that project has to be stopped or to prove that habitat really is critical and that species truly is endangered. At that same time, the project has the same eighteen months to gather information showing how they would not affect it. At the end of the eighteen months, a review is made and if the people gathered the proper scientific information, have not justifications, it is removed from the list. If adequate scientific information is gathered, and the review is made and

the demands are justifications for endangered listings is there, then it is listed. What it does, it gives us an eighteen month review period and species that really shouldn't be on there have to be thrown off there in eighteen months unless they can be [500] proven to be truly in danger. And that cut the listing about half right off the bat when it was passed. Although the important ones, those. that you still heard about, did not have to leave the list they were justified and still on the list of being protected and better now because the resources of agency can be funneled down or directed towards those that are truly endangered.

BW: Do you think because of this, and I'm sure this is on the news at times, that when the amendment was being passed and also when the Act was first introduced, do you feel that the public became more aware of it and became more aware of the environment around them and tried to help out more?

#### [510] END OF SIDE A

[000] SIDE B

RW The Act did that, it brought attention to species that were threatened and really hadn't known before. One thing it did, it made companies, due to public relation values, become proenvironment at least in the news it mentioned pro-environment quotes on it because the companies don't do anything unless it is financially beneficiary to them. They say they do and you see all these blurbs on television, radio, newspapers, magazines how much companies like Exxon is doing to save the arctic where the pipeline is or the off-shore drilling sites and so forth. You see a lot of that, you see the hot water of the power plants in the everglades are being used by the Manatee and other animals like that that they thought would threaten the animal and now they are preferred sites. You are going to see that, and the companies never would have said anything they wouldn't even cared about, they wouldn't even cared about these species, the carabu herds being able to get over or under the pipeline unless there was some act that made it legal, made the law that they had to study this. They would have never designed a pipeline that was so far off the ground where migrating animals could get through there but now with the Act in place, the way it is presented by the company, it was their idea to do it, it's their idea to study. Then they get that image or that reputation and they have to live up to it and so it has done a lot to help.

Also it gives us a chance as a public people when we see a company abusing the environment, we have a weapon to fight back. We can go to our government, now our representatives and we can say this company is doing something bad and have an impact. We can get them shut down or get the problem corrected. We have that right now. There has been a lot of good come of this and

the environmental studies that have had to be done because of the Environmental Protection Act and the Endangered Species Act have made companies more careful in the front end because they have to file a detailed study of what the impacts of the project are going to be and then they have to propose and follow through on a monitoring program when their project is started and if the results of the monitoring do not match what they said they were going to do, the proposed levels of pollution or whatever, then, they have to justify why they don't and they have to go in and clean up and correct the situation In other words, they have to police themselves. And if they don't sample on an intense enough schedule, then they are fined rather heavily and with that fine money, the government then comes in and samples for them and charges them. So a lot of good has come from this.

[100] BW: It sounds like the amendment did stop the abuse of the Act that was mentioned. Did it stop all of the problems, are there still a lot of problems now?

There are still a lot of problems now, there will always be RW: problems. One of the problems that we have right now is that we have a new definition of what a species is. The old definition is that any animal that could interbreed and produce viable offspring all belong to the same species. Now, we have redefined that, as that any population that is distinct in anyway. For example, in the Colorado River there are several endangered species of fish. The round tail chub for example, if you picked up a round tail chub in the Colorado River and the Virgin River, which is supposedly different species you couldn't tell them apart. If you put them together, they could interbreed and produce viable off-spring and so they are truly species, yet on the endangered species list they are listed separately. And both In the Virgin River, there are four rivers are shut down. species now listed; in the Colorado River, there are four to five species listed. This is true for birds, for plants that occured alongside the highway maybe because when the rain runs off the pavement has a little more water right next to the highway than they do have out in the ways from the highway. That means species can grow there and can't grow anywhere else in the large, large area and the seed is carried then off the road or something and it falls there and it grows. Because the enviornment is different from where it came from, the plants grows different and they called it a species. And is an endangered species because it is only found there and that it qualifies the definition of endangered species. Now you got a weed growing next to a highway So that's one of the that is endangered species protected. problems.

The only problem is many people don't realize that most endangered species are out being in optimum habitat. If the habitat is optimum, the species would be able to come in and compete with them and drive them out and destroy them. In the United States, the majority of the endangered plants, I should say, over ninety percent of all the endangered species and plants are in heavily grazed areas. If it wasn't for cattle, and sheep grazing off the dominant grasses and so forth, the species that are endangered would not be able to survive then. The native species would crowd them out. If you want to protect the land, you find them, you protect the land and take cattle off and the sheep off and the natural grasses and shrubs destroy that endangered species anyway. Yet the areas have been closed down for development because the endangered species were there. That's the problem we have to overcome, we have to decide where sometimes pollution is what created that species or created its habitat for that species.

[Following is about ten minutes of material Dr. Winget felt was redundant, hence it was not transcribed. There are innumerable problems and weaknesses with this act as there is with any act.]

BW: In conclusion, is there anything you would like to add that might strengthen and broaden the topic and the way in which it was covered?

RW: Just summarizing, it is extremely important that we protect species and every species has a right and a chance to live. although I would put a few mosquitos on the list with a question mark, they should all have a chance anyway. The thing that the amendment was aimed at doing and I hope it does it, decisions regarding species and resources need to be made with a science background and not an emotional background. It is not based upon the color of the feathers of a bird or whether an animal has big loving brown tearful eyes or not. That is not the important issue, the important issue is it truly endangered and does a project truly threaten it and that is what it was meant to do, so I think with that summary and that understanding, the Act and the Amendment is pretty well doing what it is supposed to do.

BW: Thank you.

[296] END OF INTERVIEW

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