VIREYA VINE

ISSUE # 7 JULY 1985
AN INTERNATIONAL GROUP OF "VIREYA BUFFS" - PUBLISHED BY THE EDUCATION COMMITTEE OF THE RHODODENDRON SPECIES FOUNDATION

NOTE: NEXT ISSUE WILL BE IN NOVEMBER 1985

From Dick Cavender, Oregon State, USA
Dear Vireya Vine, April 6, 1985

It is good to see the Vireya Vine in print again. My wife Karen and I went to Australia and New Zealand last year with Ted Van Veen and met many fellow Vireya nuts. Every one wanted to know about the Vireya Vine and Tom Tatums book. I met J. Clyde Smith and Bill Mearns at Wollongong and saw the Illawarra Branch garden. They have many Vireyas planted in the garden and it will be a real show place in a few years. We also had the pleasure of meeting Brian Clancy and Arthur Headlam in Melbourne. Arthur passed away in mid December so we were fortunate to see him. He had a very nice plant of konori X laetum in bloom. I hope that someone has given it a good home as it should be propagated. We also made an all too brief stop at Graham Snell's place. He has some very nice hybrids and a number of species I had not seen before. We met Graham Smith at Pukeiti (New Zealand) and although we will not be able to attend the Symposium and ARS Convention, I hope to see Graham when he visits Portland the week after.

My plants have survived another winter with only a few losses. R. commonae, loranthiflorum, rarum, dielsianum, jasminiflorum var. punctatum and laetum are in bloom now as well as several hybrids. R goodenoughii bloomed in January, a pale pink and fragrant. One of the hybrids in bloom is a Peter Sullivan cross of [(javanicum X Triumphans) X zolleri] X (aurigeranum X zolleri). This 12" plant has 10 trusses of 7 to 12 florets. The flower is bright orange with a yellow center. The leaves are shiny pale green. The flowers open and hold well in the house although the color is not as intence as the ones opening in the greenhouse. Probably because of the subdued light. Ramon Reyes lights might help this. The plant has bloomed the last three years and belongs on the Good Do'er list. It is hard to take cuttings however because every branch has a bud.

I have been using "Osmocote 17-7-12" for the past 1 1/2 years with good results. I 'dibble' the Osmocote when I transplant and top dress every 10-12 months thereafter. As I tend to be very hit and miss with fertilizer this has been easier on my short memory. I use about 1 1/2 teaspoon per 4" pot and 1 tablespoon per 6" pot. I really soak the plants when I water and have had no problems with leaf burn or salt build up. Lots of growth and buds in a 40' (F) greenhouse last winter. Perhaps too much growth. I find that I have about 150 extra plants and am running out of room. Most are species and a few hybrids. I would like to sell or trade them for plants on my want list. Esther Berry is still sending out Vireya seed and I passed some along that Bill Mearns sent. Any suggestions as what to do next? I have lots of bloom but no bright ideas or room to grow a lot of seedlings.

I have been finding R. fallacinum slow and R. ericoides subject to rot. R. ericoides has bloomed twice but fallacinum tends to die back a lot. Any Suggestions?

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Well Dick, I think that less than 25% of us Vireya Nuts have ever even seen a R. ericoides so we don't have too much trouble with it. Some Vireyas are hard to grow like the hardy Rhodies and I have trouble with things like R. zoelleri which is very slow for me. Respecting your faith and good luck, I must say that I am not going to use Osmocote on my plants. I, like you, am a bit hit and miss with fertilizer but have not done any damage with any thing that I have used yet. I just can not feel good about using something (Osmocote type) that I do not have control of. I may be late with the feeding but when I feed I know what and how much goes on. Would like to hear more about this type product.

If you are growing a plant that may have come from Tom Tatum with the name of R. atropurpureum then have a close look at it. John Womersley was in my greenhouse when he was here for the International Rhododendron Symposium. He was being very much the gentleman and I showed him the plants that I have labeled atropurpureum. He seemed to stop and think for a bit and said that he didn't think so. (right name) I asked what it was, and he seemed to think that these plants might be checked out and, should be R. womersleyi. He didn't say for sure, but he should know if any one would. That was enough for me to change my labels and I was happy to do so. It was a great thrill for me to have John at my house for a short time and for him to look at my Vireyas.

Since John Womersley has been back home in Australia I have gotten a letter from him saying that he is sending some maps to us. In VV#6 I asked for people in the Australian/New Zealand area to help us with maps of the Vireya areas. We still need help. I have not heard from anyone but Womersley about MAPS. Come on now, you people, help. When we get some good maps we will copy them and as a special project send then out to Viners.

E. White Smith ed.

From John Rouse, Australia
Dear VV, April 15, 1985

For some six months I have had on loan from Graham Snell a plant of R. rubineflorum. One flower was selfed by George Argent from Edinburgh when he visited Melbourne in October last year, but within three weeks the pistil aborted. This seemed to set the pattern for further pollinations with this plant as the seed parent. Pollination with R. gracilentum and R. lochae failed and although seed was obtained from two pods of R. rubineflorum selfed and one pod of rubineflorum X anagalliflorum the germination was very lean and the few seedlings obtained have such low vigor that they are unlikely to survive. Have other "Viners" experienced seed set on this species? By contrast the cross R. macgregoriae X rubineflorum has produced 8 large pods and I expect in due course to obtain viable seed and hopefully vigorous seedlings.

In an earlier "Vine", I reported on seed obtained from the pollination of R. kawakamii var. flaviflorum X R. santapaui. The seedlings are developing well though they nearly expired due to my overfeeding them. The standard strength fertilizer which I give to Euvireya seedlings is too strong. More recently, as a somewhat rare event, viable seed was obtained form the reciprocal cross on a plant belonging to Bob Withers.

The seed sown 7 months ago had a percentage germination of 50 % and the stronger seedlings are now 5 to 6 mm tall. The seedling vigor is low compared to Euvireya seedlings but about the same as that of seedlings obtained from the control pollinations of R. santapaui selfed and crossed with a sister seedling.If these seedlings expire, it will it will not be due to excessive fertilizer! Because of the similarity of the two parent plants, the hybridity of there seedlings is unlikely to be conformed until they flower.

Investigations into sexual compatibility within Rhododendron with Elizabeth Williams and Bruce Knox of the University of Melbourne, Plant Cell Research Center, which resulted in the above seedlings, also produced seed from the cross (laetum X aurigeranum) x retusum. This seed was sown in January 1981 and the first seedling flowered in April of this year. The flowers were intermediate between those of the parents in shape,size and colour thus confirming hybridity which had been suggested by the intermediate size of the hybrid leaves. While the parent plant is a magnificent hybrid with many large pure yellow flowers per truss and the the male parent has many single bright red flowers with stigma and anthers protruding in front of the corolla lobes, this first hybrid seedling to flower seems to me to have flowers that are inferior to both parents and so lacks horticultural potential. While, in general, species within Vireya are self-compatible and will cross with each other, there appears to be a sexual compatibility barrier between those species in subsection Pseudovireya from temperate regions and the rest of Vireya including the tropical species in subsection Pseudovireya as our attempts to cross R. kawakamii and R. santapaui with any other Vireya has failed to produce seed or on the few occasions when seed has been obtained they lacked developed embryos.

In "VV" issue #3, I reported on the compatible graft combination R. kawakamii var. flaviflorum on R. 'Fragrantissiumum' and in the March 1985 issue of "The Rhododendron" (Australian Journal ed) I reporter on initial trials to determine which Vireya/Fragrantissiiumum grafts are long-term compatible. Preliminary results suggest that R. quadrasianum var. rosmarinifolium on R. 'Fragrantissimum' may be such a combination, which in turn suggest the more general possibility that Pseudovireya/ Fragrantissimum grafts are long term compatible. Other graft combinations with Vireya as the scion may be long-term compatible and result in more robust plants than the Vireya species on there own roots or grafted onto hybrid Vireya stock. Perhaps other "Viners" would like to try their hand at Vireya grafts and report on their successes and failures.

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I tried grafting Vireyas after Don Stanton told me about it a long time ago. The grafts did take but would not stay for a long time. I used everything that I had at the time to graft on to, maddenii and Maddenii hybrids, cinnabarinum seedlings and Vireya hybrids. This is a good way to save a cutting but you will probably need to root the cutting in the end. E. White Smith ed.

From Tom Frederickson Washington State
Dear VV, April 12,1985

Yesterdays mail brought great joy to an other wise arid day. The initial copy of the "VV" emerged from the bills and advertisements delivered to this address. Being a babe in the woods, at least with the tropical Rhodies, the "VV" was consumed with great relish. (maybe I should say eaten as if it were apple pie) But I do digress.

Two items made a strong impression, first seedlings. I do not understand how slow-slow the little beasties grow. Alluding to Fran Rutherfords notation of Feb 14 th, I find a reconciliation of my efforts.

Along with E. White Smith's encounters with potting mixes. It appears to one, such as myself, the mix is an enigma to those who would like to sample these lovelies. I have used a interblend of 1/3 peat, 1/3 pumice and 1/3 fir chips, the fir chips have experienced at least one year of weather conditions. Seems to be employable, to not only Vireyas, but to other types needing super drainage. I would be interested in any condescending thoughts, specially the fir chips.

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Tom, what do you mean by "fir chips"? Bark, sawdust, shavings? If I could have gotten the fresh water Bark that the Orchid people use when I changed mixes last time I sure would have used bark in my mix. Some times it is in short supply or it is the wrong time of the year for the stores to have it. I use clean bark when I have it in my mix. I also like the course, chunky type of peat moss but it also can be a bit hard to find at times and it may not make any difference anyway. Just cost more. E. White ed

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From Leslie Riggall South Africa
Dear VV May 3, 1985

First may I answer your question as to what and where is Fern Valley. It in a private botanic garden situated in a delightful valley which always pleases visitors, even if they are not interested in the plant collections, camellias, rhododendrons, azaleas, magnolias, ferns and so on. It is near Durban and any A.R.S. member coming to South Africa should include a visit to Fern Valley in his itinerary.

We also have heavy loss of seedlings after good germination of Vireyas and we have not solved this problem. We save a percentage by watering (not just spraying) the pans with anti-Phytophthora (root-rot) fungicide, so perhaps root-rot is the problem. It is claimed that tree-bark inhibits Phytophthora and we are experimenting with pine-bark. At least this will provide good aeration and drainage. In Borneo I saw natural seedlings only in thick moss on top of vertical banks and of course they often grow on trees. This suggests that drainage is more important than nourishment and I feel that fertilizing should be very moderate, never using chemicals.

With this problem, I was naturally intrigued by the letter from Bill Miller, who raises Vireya seed on rotten wood. Obviously a man of few words, he says simply, "Works Great". Please ask him to explain in detail his method, so that we can all learn, in the next VV how he does it.

Regarding Ramon Reyes' query, vireyas are tropical plants and shortening the light days would not be natural for them. But as they flower after the rains, a substantial reduction in watering should bring forth flowers. They seem to be more tolerant of drought than other Rhododendrons

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Is it not great how different people do things? I think that if I did not use fertilizer that my plants would stop growing. Also, the old question of "chemicals", what really is a "chemical" fertilizer?

I understand what Lesley is saying but some people (not plant people) think that "chemical fertilizers" come from the stars, which reminds me of a tee shirt I saw the other day on a young man that said " Beam us up Scotty, there's no humanity down here". The real neat thing about Rhodie people is that they will try anything and it usually works. The Vireya Vine is for passing on ideas for others to try, good or bad. I think that there is humanity down here and we are showing it with this publication. E. White ed

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From Hugh Caldwell Florida, State, USA
Dear VV, May 20, 1985 Vireyas in Florida

Our Vireyas came into Florida in 1972. We had the Hybrid Rhododendrons growing before we moved to Florida. The Hybrid (hardy) rhododendrons will not grow here, due to the heat and the hot sand. We have a lot of sunshine and long hot days and nights during the summer (typical day time high of 89' and night of 71'). The fall season is beautiful with many warm days and cool to cold nights. We have about 32 days which the temperature drops below freezing.

The Vireyas are outside most of the time in open air. They are under big pines and oaks. The Vireyas get the early morning sun, a total of about four hours of direct sunshine. Very little if any afternoon sunshine. During the winter the plants are put in the greenhouse (a Turner Greenhouse 14' X 26') on long tables. This will be changed the fall, due to the cold temperatures. We get our heat from the ground being wet, and two space heaters.

During the winter of 1983-84 we had a freeze on Dec. 24th, we had a low temperature of +11'F, and the wind was blowing for about 30 hours. Everything on the outside was frozen or killed. we had giant trees frozen, also the Azaleas of all sizes were killed or frozen. All of the farm crops both large and small were lost. They have a lot of small farms in our area, small family farms. The Vireyas were inside the greenhouse under what heat we could find and only a few plants and blooms were lost. NOTE; The sap is still up in the trees and other plants. The freeze moves in so fast that the sap doesn't have time to move up or down. A Florida freeze can move in and kill everything and the weather can be warm again in a few hours. A lot of homes in our area are heated with electric power. The power Company was in trouble this night (12-24-83), the load was to much and all of the power was off.

Last summer all of the Vireyas and Azaleas were hurt after the summer heat came. The bark is frozen from the wood of the plant, the sap or new growth can not move and causes the plant to start dieing back. At this time the dead wood was cut back and cuttings were taken from new wood that could be found.

All of the old timers were telling everyone that this was the hundred year freeze. This only comes our way every one hundred years was the old folk tale of the year. When the winter of 1984-85 came, everyone had finished replacing their trees and plants. (About 75% of the yards were hurt from the freeze. The Garden Shops were going wild trying to fill orders and to locate wanted plants. The only trouble was that no plants could be found because the big freeze hit all of the South. The hundred year freeze was a big tale because in January of 1985 we had a temperature low of +7'F. This was two winters with killer frost and very low temperatures. Again every thing was killed or hurt bad. The larger Vireyas were hurt too bad to save and were lost. I tried to save the Vireyas by cutting back the wood but this was no good, every thing was frozen and bark split.

This year (1985) we are trying to cover everything and the greenhouse will be changed also. All of the tables will be removed and everything will be put on and in the ground. A cover of sawdust will cover the pots and plants inside the greenhouse. Also we will have the heaters.

The floor of the greenhouse being wet with sawdust gives off a great amount of heat. For the past two winters it has been a very cold Florida, a lot of crops lost to the cold. We have lost two years of plants, but you have to start over again.

You will find the Hybrid Vireyas to be stronger than the species. The Hybrids with three or four crosses are even stronger. Which one of the species is strongest I can't tell you because I don't know. This I would like to know. All of the Vireyas are inside in the winter here because it only takes one killer freeze to hurt you and it does all of the dirty work. The heat is no problem here, you just keep everything damp and move plants to the shaded areas. Our water comes from a flowing well. Florida has a great underground lake and so far the water has not been any problem. There is State water control on lakes and rivers here. We put our Vireyas in pots and this is no problem. When the plants are in full bloom you can move them around and show them off. I find that the plants are cooler in white or light color pots. I try to keep the root systems cool and the soil around them cool. We try to root all of our cuttings in the open under the pine and oak trees. We are a few miles from the coast and get some of the sea breezes from the ocean for the plants and this helps a lot.

NOTE: The temperatures and days of freezing here comes from the NOAA weather report. The flowing well is 450' deep and is classed as a 6"-3" flowing well.

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Hugh's place is a few miles south of Jacksonville in Northern Florida. Also I have not had my power off in the winter for a long time but I always keep a Coleman Lantern and stove ready to use. The gas from the burning may hurt the plants but not as bad as the cold. E. White ed.

Ed. Note: When John Womersley was here at the International Rhododendron Symposium, he gave a speech on " Goals and Coordination in Collecting Vireya Section Rhododendrons". He gave me a copy of the speech when I asked him to write something for the Vine. I said that I didn't think I could print it all at once and he said that was OK with him. So here is a bit of a real good speech. More to come in a future "VV".

From John Womersley South Australia, Australia

Species of Rhododendron which are classified into the section Vireya are found from the eastern Himalayas (Sikkim), through South East Asia, the Peninsula and Archipelago of West and East Malaysia (includes Sarawak and Sabah), Brunei, Indonesia (Sumatra, Java, Bali, Kalimantan, Celebes, Moluccas, and Irian Jaya-West New Guinea), Papua New Guinea (East New Guinea, Bismarck Archipelago and Bougainville), the western islands of the Solomon Islands and a small area in north eastern Queensland, Australia. This is range of 73' of longitude, or as measured at the equator a distance of 7,300 km (4560 miles). Northerly limits are in southern China and the island of Formosa, about 24' north latitude and in the south about 17' south latitude in Queensland, Australia, a total range of 41' of latitude, a distance of 4100 km (2560 miles).

Within this area are 296 species of Rhododendron, section Vireya, with the probability of continued reduction of names to synonomy and further new species to be discovered. The system of classification established by Sleumer recognises 7 subsections, of which one, Euvireya includes 7 series. The spread of these species throughout the geographic region, which I have called "Vireya - Land" and the basic taxonomic classification can be seen in fig. 1 and table 1.

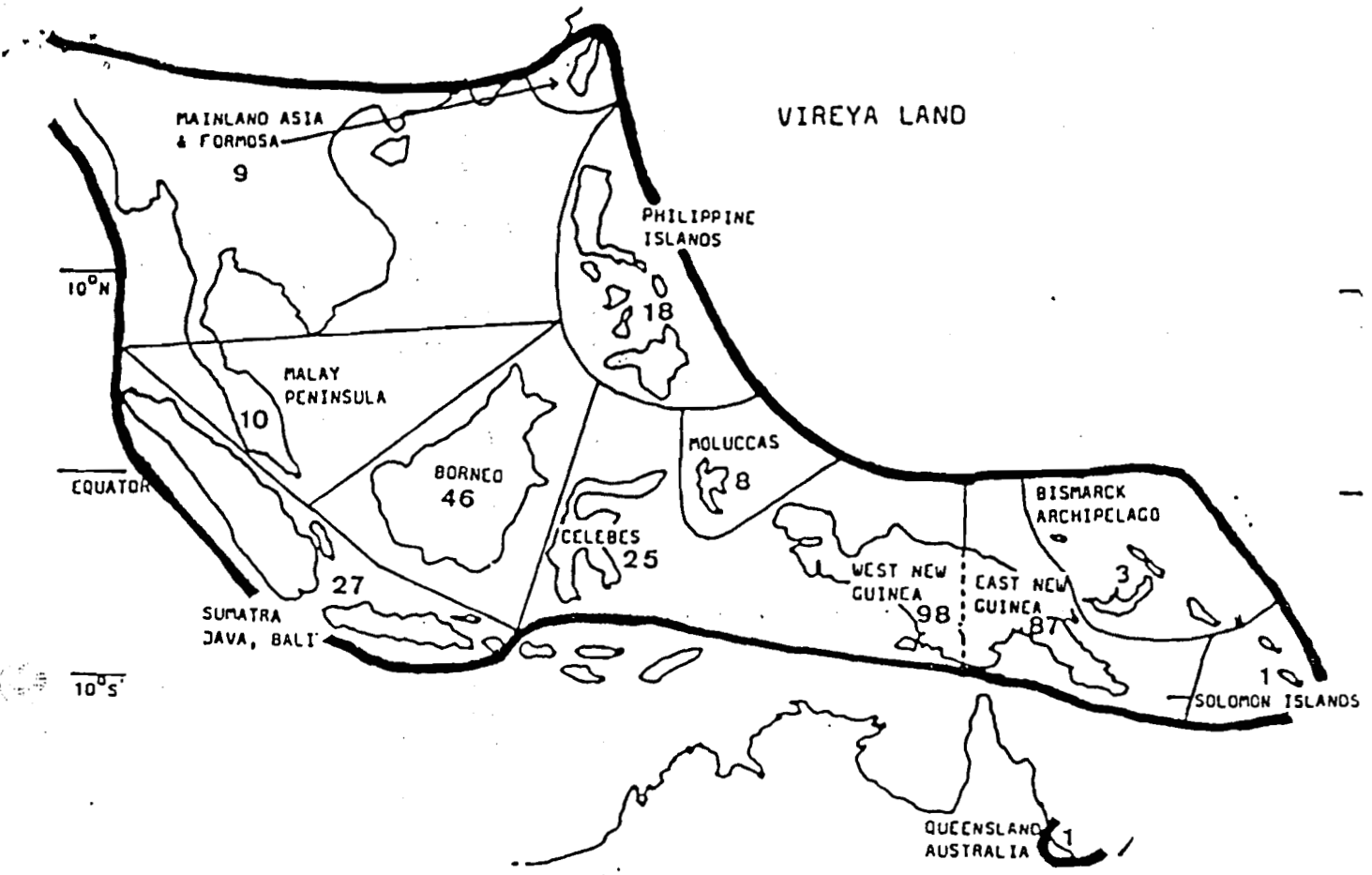

Fig. 1 Geographic regions and distribution of Rhododendron

Sub-section	ASIA MAINLAND & FORMOSA	MALAY PENINSULA	BORNEO	SUMATRA JAVA, BALI	CELEBES	MOLUCCAS	PHILIPPINE ISLANDS	WEST NEW GUINEA	EAST NEW GUINEA	BISMARCK/ SOLOMONS/ AUSTRALIA.
PSEUDOVIREYA	6	4	3	3	3	1	1	12	7	
SIPHONOVIREYA								6	3	
PHAEOVIREYA					2			22	25	1 BISMARCK
MALAYOVIREYA		2	9	2		1	2			
ALBOVIREYA				5	4		1	3	3	
SOLENOVIREYA		1	5	1	3	1	2	8	17	1 BISMARCK
EUVIREYA										
SERICEA: LINNAEOIDEA								9	5	1 BISMARCK
SAXIFRAGOIDEA								1	1	
TAXIFOLIA							1			
STENOPHYLLA			1					3	1	
CITRINA				1						
BUXIFOLIA		1	5	5	4		4	15	9	
JAVANICA	2	2	22	10	9	5	7	19	16	1 SOLOMONS 1 AUSTRALIA
UNPLACED	1		1							
REGIONAL TOTALS	9	10	46	27	25	8	18	98	87	3 1 1

tab. 1 Taxonomic and geographical distribution of Rhododendron sect. Vireya in VIREYA - LAND.

As can be seen in fig.1 there are two main centers of speciation of RHODODENDRON sect. VIREYA; in the west there is the rather diffuse area of Sumatra, Java, Bali, Borneo and Celebes; to the east there is the tremendous speciation which occurs in the very varied terrain of New Guinea. No where else in the world is there a high mountain range extending some 2000 km with the equator thus having climates ranging from the tropical lowland to alpine and permanent snow fields and glaciers. In the collective area of West and East New Guinea there are 161 species of Rhododendron- all in sect. Vireya at present recognised, as occuring there. Of these not less than 30 species are recognised on the basis of a single collection. There could of course be recent collections of these little known species among herbarium collections not yet identified, but this is unlikely. 21 of these species are reported from West New Guinea, 9 from East New Guinea. Of the latter there are three species based on collections made before 1914 during the German Administration, now lost during the bombing of the Berlin herbarium during 1943. No modern collections have been reconciled with the discriptions of these three species.

The education committee now has an "Independent Study Course" on Rhododendrons. The course consists of slides and descriptive material on one or more of each species in each subsection except for Vireya. We are now expanding this program to include Vireyas and urgently need copies of slides of Subsections Malayovireya and Albovireya. Later we will develope a complete program on Vireyas. If you have some good slides that you would be willing to share, please let us know. We are interested in slides of trusses, plant habit and native terrian. Thanks to Stan Eversole for the slides. (Fran Rutherford)
NOTE; AND HEY, WE NEED YOUR L E T T E R S TO THE "VINE" OR WHAT WILL WE PRINT

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