

RUBBER EXPERIMENT IS CLOSER TO CITY

Russian Dandelion Is
Sowed Near Target
Range School.

Sowing of 20 acres of Russian dandelion seed started in the Target Range district adjacent to Orchard Homes late Tuesday, the Forest Service announced, marking the first rubber substitute experiment in this state.

A Forest Service crew under direction of Ray Coster prepared the ground, leased from residents of the suburban district, for planting, the tract being near the Target Range schoolhouse southwest of the city.

Specially treated seed is expected to sprout rapidly, as has that in the experimental plot.

Row irrigation of the Russian dandelion will be required, as for beets or garden truck. It is planned to use power-drawn cultivators as much as possible, with some hand weeding required.

The other Russian dandelion plot will be sowed at the Miles City experiment station, with the Target Range tract being used instead of that originally planned at the Nine Mile remount station.

The Russian dandelion has proved adaptable to production of rubber in the U. S. S. R. It is expected that a considerable quantity of seed will be obtained from the area sowed in the two Montana plots.

DEATH AWAITED



REINHARD HEYDRICH
"DER HENKER"

SALT DISTRIBUTED FOR GAME ANIMALS

Lolo Forest Placing
Blocks, Cooperating
With State.

Salt needs of game animals in the Lolo forest are to be amply supplied.

HEYDRICH INCIDENT HAS NAZIS WORRIED

Burning Spirit of Con-
quered Peoples Shown in
Attack on Gestapo Chief.

BY DEWITT MACKENZIE,
Wide World War Analyst.

Small wonder that Hitler's chancellorship is said to be swept with consternation at the attempted assassination of Reinhard Heydrich, deputy chief of the dread Gestapo (secret police), in Czecho-Slovakia.

It would be difficult to exaggerate the significance of this event, for it emphasizes the burning spirit of that invisible front of conquered peoples who are only waiting for their chance to turn and rend their oppressors. The great daring of this effort to exterminate powerful "Der Henker" (The Hangman) gives a measure of the determination of the wearers of the Nazi yoke.

Even in Berlin.

This defiance of an organization upon which the Fuehrer has depended so greatly to keep a tight rein both abroad and at home is reported to have resulted in arrests even in Berlin. Any weakening of the authority of the Gestapo obviously creates a danger to Nazidom. From Hitler's standpoint there is an unfortunate coincidence in the unprecedented British air raids. Since these will give a mighty fillip to the fighting spirit of the occupied countries and already are reported

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GUAYULE WILL NOT FILL ALL RUBBER NEEDS

By 1945, and not before, the United States may have available a supply of rubber-bearing guayule bushes with a potential yield of from 22,500 to 27,500 tons of rubber, about four percent of the nation's need.

Thus said Major Evan W. Kelley, regional forester, interviewed today on his return from Salinas, Cal., where he was in charge of developing a plantation of guayule bushes.

Major Kelley said that 12,000 seed beds have been prepared which will yield enough seedling bushes to plant from 45,000 to 55,000 acres. On the basis of 1,000 pounds per acre, the yield from three-year-old bushes would be from 22,500 to 27,500 tons.

Major Kelley said, however, that the figure of 1,000 pounds per acre, attained at Salinas, might not prove applicable in other localities over which the large acreage must be spread.

The need for 1,000,000 tons of rubber per year is based on military requirements of approximately 800,000 tons annually and civilian use of about 200,000 tons, or 25 percent of the average of other years.

Discusses Situation.

Discussing the rubber situation, Major Kelley declared that it is "altogether regrettable that through the years the government has not carried on experiments so that in the pinch we are now in, we would know where to go and what to do."

Declaring that "our need for rubber is not to be measured in dollars and cents," Major Kelley said that the war "should teach us one thing—our values can not be established with items customarily looked on as wealth, such as gold or silver, but in copper, zinc, iron, steel, manganese, oil and rubber."

Major Kelley said that all guayule bushes now growing at the Salinas plantation would produce about 600 tons of rubber, but that the plants will have to be preserved for seed. In the fall of 1942 or 1943, depend-

(Continued on Page 7, Column 5.)

GUAYULE WILL NOT FILL U. S. NEEDS

Major Kelley, Back From California, Says Rubber Will Still Be Scarce.

(Continued From Page One.)

ing on the urgency of the need, about 400 tons will be available.

Commenting on the Salinas project, Mayor Kelley said that "Everything we went down there to do has been accomplished, and a great many things not anticipated."

All nursery stock has been planted, although not as much was available as was estimated due to poor growing conditions last year. About 1,200 acres were planted, as compared with 1,500 acres as originally planned.

More seed beds, which will produce seedling trees this fall, were prepared. Mr. Kelley said that in place of the planned 11,000, about 12,000 beds four feet wide and 400 feet long, which if placed end to end, would reach 1,200 miles, were placed.

These beds will produce bushes to plant from 45,000 to 55,000 acres, with transplanting scheduled to begin as early in the fall as weather permits. The current activity is weeding the seed beds, and Major Kelley said 3,000 persons—2,000 women and girls and 1,000 men and boys—will have the first crop of weeds removed by the end of this week, after about a month of work.

Major Kelley said that although this may appear to be expensive cultivation, the large crew is actually weeding 450,000,000 plants.

Leasing Many Acres.

Crews are now engaged in reaching agreements for leasing the thousands of acres of land on which the seedling bushes will be planted. Proposed locations are several valleys in California, with small demonstration areas in Texas and Arizona.

A research program aimed at learning the habits and peculiarities of guayule is now being organized, with laboratories being constructed.

Major Kelley said that the emergency rubber project also includes experiments with golden rod in South Carolina, giant milkweed on the deserts of Southwestern United States, the Madagascar rubber plant in Florida and California, rabbit brush on the deserts and Russian dandelion in the Northern states west of the Mississippi.

As for synthetic rubber, Major Kelley said that no satisfactory method has yet been found to produce a substance which will answer all needs, especially for resiliency. He also said that reclaimed rubber must include large quantities of natural rubber when it is manufactured.

U.S.F.S.

WEDNESDAY EVENING, OCTOBER 5, 1942

FORESTERS SENT TO WAR PROJECTS

Seven to Guayule Job,
Score to Help Chrome
Mine Access Road.

Seven Forest Service employees of the region have been called to Oceanside, Cal., to assist in the guayule rubber planting program, Axel Lindh, assistant regional forester now on detail there, having sent an emergency call for assistance in establishing a new camp.

William Royer and Lawrence Zach, both of whom have been working on the Forest Survey at the Northern Rocky Mountain Forest experiment station, have left for Oceanside.

Others leaving on this detail are Roger Thaanum from Sandpoint, Bernie Glaus from Orofino, Merrill Oaks from St. Maries, Don Chamberlin from Grangeville, and Robert Jansson from Helena, all staff men or forest guards on these forests.

Twenty forest guards and maintenance men from the Western forests of the region are to be detailed to the chrome mine access roads south of Columbus, in the Stillwater country, leaving as soon as possible. The Forest Service has agreed to furnish these men to help push the completion of the road, which is to bring out the chrome ore so badly needed in steel processing. They will be on a temporary detail.

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Missoula Sentinel
October 5, 1942

Dec. 8-1942

FARM PLANTING OF KOK SAGYZ LIKELY

Possible Future of Raw
Rubber Production in
Northwest Soil.

Farmers can grow raw rubber, extracted from the Russian dandelion roots, with good soil producing 100 to 200 pounds of crude rubber an acre, tests conducted this season indicate, says The Northwest, organ of the N. P. agricultural development department. The kok-sagyz or Russian dandelion plan can be adapted to farm cultivation, with much experimenting still under way with machinery for planting, cultivating and harvesting. A beet-seed planter can be used for Russian dandelion seed, after minor adjustments and replacements. Four-row cultivators can be used for the cultivation and an ordinary beet lifter, with alterations, has been used to loosen the soil around the roots and give them a pull prior to gathering.

Much depends on the pilot plant tests now under way and the experiments to be conducted with the tons of roots shipped from various plantations to the Eastern laboratories. With satisfactory results, the pattern for growing of Russian dandelion on a commercial scale will take definite shape in 1943, it is anticipated. Fall plantings of seed were made as nearly as possible before winter freeze-ups, so as to cause the seed to stay inactive through the winter season and be ready to start growing at the earliest possible time in 1943. Spring plantings are planned with the seed now available.

Missoula WAACS Are Half of Quota For Whole State

Of six Montana Women's Army Auxiliary corps candidates signed up in recent weeks, half were from Missoula, it was reported at the Army sub-station here where preparations are under way for WAAC induction ceremonies to be held at the Wilma theater Friday night. Plans for this program are being made by Corporal Charles Brown, recruiting officer, stationed here. Captain Worth L. Kindred, field artillery officer from the Army district headquarters at Butte, will be present to introduce Missoula women, who have signed up for service in the Women's Army. The program will be brief and will include musical numbers of a patriotic flavor. WAACS to be presented, will be named later in the week when candidates, who are now taking examinations, will know the outcome of their interviews.

POSTAL BUSINESS RUSH FELT MONDAY

Slowed Up Tuesday by
Breezes. November
Favorable Month.

A rush of holiday business felt Monday at the Missoula postoffice was stalled by unfavorable Tuesday morning weather conditions.

Stamp sales receipts were close to a thousand dollars Monday, it was reported.

Missoula Sentinel
December 8, 1942

GREAT EXPANSION OF GUAYULE WORK

Bradeen, Head of Rubber
Procurement, Supply
Visitor at Home.

An idea of the expansion plans of the guayule rubber plantations, in which so many Missoulians and former regional officials and employees are now participating is given by O. C. Bradeen, chief of procurement and supply for the guayule program, a holiday visitor at his Missoula home.

By March 1, 16,000 more men are to be employed on guayule work.

By the spring of 1944 the rubber program is to employ a total of 46,000.

Plantations and nurseries aggregating 500,000 acres, sufficient to produce 90,000 tons of rubber, will be under way then. New nurseries are being initiated at Bakersfield, Cal., Del Rio, Texas, Edinburg, Texas, and in the Salt River region near Phoenix, Ariz.

Nurseries sufficient to provide 4,700 miles of seedbeds, each four feet wide and 400 feet long, are now in operation, and new nurseries are under way at Indio and Oceanside, Cal., each with 12,000 beds. These are irrigated by overhead sprinkling systems of oscillating pipes.

Headquarters of the guayule program, under direction of Major Evan Kelley, were being moved to Los Angeles Saturday, Mr. Bradeen said.

In his office as head of procurement and supply for the rubber program are 10 former Missoulians, Lloyd Zbinden, R. D. Kizer, Gladys Rosich, Ann Carey, Doris Rankin, Helen Zehntner, Kathleen Watt, Ray Pierce, Ed Mackay and Margaret York.

Donald Bradeen, his son, came from Harvard university where he is preparing for an Army commission in March, to join Mr. Bradeen in the Christmas visit at the family home here. Both will return Wednesday. Mr. Bradeen has been on detail to the California guayule job for four months.

GUAYULE PROCESS SAME AS FOR BEETS

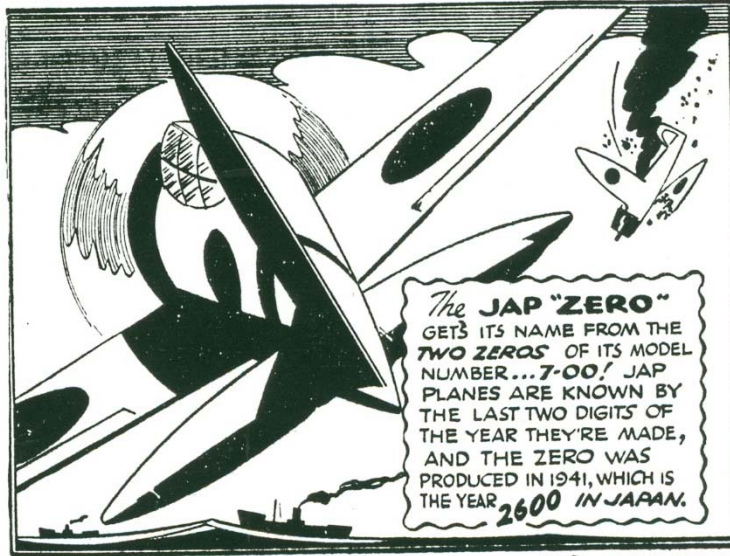
Rubber Extraction Is
Likened to That Used
In Sugar Making.

Missoula motorists facing a rubber famine through coming years will be interested to know that the process of obtaining rubber out of guayule, in projects such as that in which a large Missoula delegation from the Forest Service is assisting in initiating in California, is the nearest possible to the processing of sugar beets, as done here.

Guayule shrub plants attain a weight of four and five pounds under cultivation, provide more rubber if left briefly in the fields after being taken out of the ground, and are chopped in a mill, then crushed into fiber, which is put through a chemical process involving the flotation method.

The government is buying a secret germinating process involving acid treatments with the land of the Intercontinental Rubber company. The gummy substance extracted from the plant has been used since 1905 in construction of automobile tires and other rubber goods. It is necessary to remove surplus resin much more evident than in tree rubber. The plantation has been carried on in the Salinas valley since 1912, in a commercial way since 1923, with the first mill erected in 1932. Pure guayule rubber can be produced for 10 cents a pound with modern methods, while the present price of tree rubber is 20 cents a pound.

This Curious World By William Ferguson



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"RUBBER RANCHO,"
SYNTHETIC RUBBER PLANT
RECENTLY PUT INTO OPERATION
FOR U. S. GOVERNMENT BY THE
B. F. GOODRICH CO., NEAR PORT
ARTHUR, TEXAS, WILL PRODUCE
120,000 TONS OF RUBBER A YEAR
...OR AS MUCH AS COULD BE
OBTAINED IN A YEAR BY
120,000 COOLERS, TAPPING
30,000,000 RUBBER TREES.



QUOTING ODDS



NEXT: Looking for Nazi suckers.

Missoula Sentinel
ca 1943

Slab of Rubber From Kok Sagyz

A smooth, round slab of black rubber, first evidence of the product of the Russian dandelion or Kok Sagyz grown in this country, has been received at Forest Service headquarters from H. Basil Wales, field director for the Department of Agriculture in the North Atlantic states.

The rubber was produced from the roots grown in this country last year, appearing to be of satisfactory composition.

Sixty acres of Russian dandelion are being planted in the state this spring by the Forest Service in further continuing the experiment initiated by the Department of Agriculture.

Missoula Sentinel May 1943

Russian Dandelion Seeds Being Collected Here

Forty-nine acres of Russian dandelion are in bloom in the Target Range and Frenchtown valley districts at the present time, plantings undertaken by the Department of Agriculture as an experiment toward solving the rubber shortage problem.

Crews are weeding and cultivating the Russian dandelion, or kok sagyz patches in the region. The season has been late, with wet fields added difficulties.

The seeds are collected as the blossoms turn from yellow to white.

In the fall the roots will be harvested, for use in rubber manufacturing experiments.

Missoula Sentinel June 11, 1943

Men Here From Kok Sagyz, Budget Bureau

H. Basil Wales, director of the Kok Sagyz rubber emergency project, arrived in Missoula Wednesday to confer with regional forestry officials regarding the experiments carried on in this state. Plots have been planted and harvested in the Target Range district and elsewhere near here as the Russian dandelion experiments were carried on.

E. Seidman and Willard Carmel of the United States Bureau of Budget have arrived in Missoula this week to inspect records and consult with officials at the Forest Service regional headquarters.

Herman Ficke, ranger at the Seeley lake station on the Lolo forest, returned to his post Wednesday after a special winter detail in Missoula.

Ranger Walter Robb and Alternate Joe Wirt of the Superior district have been in Missoula this week on forest business.

Monday a Lolo forest crew will go to the Gold Creek guard station to repair the buildings, for which material was brought in last fall.

Missoula Sentinel March 8, 1944

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Better "What Would You Do
solution" (b).

TO GUAYULE PROJECT.

Darby, Oct. 23.—R. C. Fitzgerald, local forest ranger, and his assistant, Robert Henderson, and Leonard Greenup of Grantsdale are leaving Sunday for Salinas, Cal., where they will be employed on the guayule rubber project work. Charles Engbretson, who was employed in the Forest Service here this summer, left the early part of the month to work on the guayule project.

Information on

Missoula Sentinel October 23, 1945

FICKES FINISHES CONSTRUCTION JOB

Initiated Extensive
Building Program
On Guayule Area.

Having initiated and been in charge of building construction aggregating an expenditure of \$1,200,000 on the guayule rubber project in California, Clyde P. Fickes has returned to Missoula, his detail at Salinas headquarters completed. With Mrs. Fickes he arrived Sunday night.

Among his major projects undertaken on the guayule project were the building of five camps for an aggregate of 1,080 families, and another camp for 400 men, all of whom are employed on the work. This entailed construction of 300 buildings.

At the Salinas headquarters, seven shops and three laboratories were constructed.

An extensive building program is continuing on the guayule project, something far beyond anything the Forest Service has ever undertaken, Mr. Fickes said. Housing must be provided for 11,000 men, and next year facilities are to be added for another 30,000 men. The expansion followed the success of the guayule seed planting initiated in February.

Mr. Fickes has completed his second detail at Salinas, Cal., the first from February 11 to May 25, the second begun June 24 and now completed.

Mr. Fickes is in charge of Forest Service construction and improvements in region No. 1.

Missoula Sentinel
November 30, 1945