

Minutes Of A Special Meeting On Squarros Knapweed  
Held At Nephi, Utah November 3, 1954 at 1:15 p.m.

Those in Attendance were:

Carl Frischknecht, Director Utah Extension Service, Logan  
Ernest O. Biggs, Tooele County Agent, Tooele  
Wm. R. Judd, Tooele County Assessor  
Ross Gowans, Tooele County Commissioner  
Ted Robertson, Land Owner, Spanish Fork (5th North & 2nd East)  
Dick Robertson, Land Owner, Spanish Fork  
Hal L. Michelsen, Juab County Weed Committee  
B. R. Ellison, Weed & Seed Supervisor, State Dept. of Agriculture, Salt Lake  
J. Pratt Allred, Bureau of Land Management  
J. A. Pomenke, Bureau of Land Management  
C. Wayne Cook, Range Management Department, U.S.A.C., Logan  
Louis A. Jensen, Extension Agronomist, U.S.A.C., Logan  
D. C. Tingey, Agronomy Department, U.S.A.C., Logan  
Eliss H. Crandall, Assistant Director, Utah Agricultural Exp. Station  
Rodney G. Rickenbach, Millard County Agent, Fillmore  
Blaine Robinson, Millard County Weed Supervisor, Hinckley  
Ralph H. Horne, Assistant, Millard County Agent, Delta  
Haton Sakey, Lehi  
F. M. Anderson, Weed Supervisor, Utah County  
S. R. Boswell, Utah County Agent, Provo  
Elmer D. Taylor, District Agricultural Inspector, Provo  
C. R. Lomax, Commissioner, Juab County  
H. R. Francom, Commissioner, Juab County  
W. L. Hoyt, District Judge, Nephi  
E. Alton Elbertson, Officer Manager, ASC Mona  
Ariel Jorgenson, Commissioner, State Department of Agriculture  
Ray Burtenshaw, Juab County Agent, Nephi

The meeting was called to order by Dr. Carl Frischknecht who stated the purpose of the meeting and reviewed briefly what had been done on the problem up to now. He mentioned the previous meeting held here on September 23, and the assignments that were made as follows:

1. Get a positive identification of the weed.
2. Learn as much as possible about the history of it.
3. Hold meetings with weed committees of surrounding counties to acquaint them with it and organize surveys.
4. Visit seed plants to acquaint them with it and ask cooperation in preventing its spread.
5. Formulate plans for research on its habits and possible control methods.
6. Meet again here early in November to hear reports and decide what action to take.

Ariel Jorgenson then took charge of the meeting and served as chairman. Louis Jensen was appointed secretary and was instructed to take minutes. Mr. Jorgenson made some introductory remarks calling for cooperation of everyone concerned with this problem.

Bliss Crandall related how the weed had been reported in May, 1954, and specimens collected by Ray Burtenshaw and Louis Jensen for identification. It was first thought that it was Spotted Knapweed (Centaurea maculosa). Later when better specimens were obtained a positive identification was made by Arthur Holmgren, Curator of the Intermountain Herbarium and Arthur Chronquist of the New York Botanical Gardens. The weed was identified as Squarros Knapweed (Centaurea squarrosa). These taxonomists state that it comes from the Middle East and they have no previous record of it in North America.

A report was presented by Bernard Ellison of the work he and Louis Jensen had done as assigned in the September meeting. Together they met with county weed committees of Tooele, Utah and Millard Counties. Plant and seed samples of the weed were shown to these groups and the problem explained. Each county agreed to make a survey to determine if this weed is present in the county and meet in November to make a report. Ellison and Jensen also visited the seed plants in Salt Lake and Delta to acquaint them with the problem and ask their cooperation in helping to prevent its spread in commercial seed.

S. R. Boswell introduced F. M. Anderson, Utah County Weed Supervisor and Dick Robertson, owner of some of the infested land. They reported making a survey of the sheep bed grounds on the desert winter range and also the area where sheep are unloaded at Soldier Summit for the summer range, and also the roads in each vicinity. In the past few years, the sheep have ranged on the infested area just prior to being moved to these areas. None of the weed was found in any of these places.

Ariel Jorgensen reported that Squarros Knapweed had been officially declared noxious recently by the State Board of Agriculture.

Louis Jensen reported on investigations as to the possible history of this weed in the state. A Mr. Morgan, employee of the McIntyre Ranch was shown a specimen of the weed and claimed that he had seen it near the grain elevators when he had first come to work for them in 1928. A Mr. Mortensen, an employee of the Moody Bros. Seed Company in Delta claimed that he saw it in 1938.

Mr. Robertson reported that the infested area had been used for an emergency landing field as late as 1930. The railroad has been there about 50 years.

Dr. Wayne Cook reported on the survey of the infested area by him and his assistants from the Agricultural College. This was needed to determine the extent of the problem and to see what research is needed. A general reconnaissance survey was made with men traversing the area on lines 1/8 mile apart. He passed out maps with the infestations marked and explained them as follows: They found a dense stand on the area of the wheat field not plowed this year, and a much less dense stand on the part plowed this summer. It was found on the road out to Tintic Junction and on U.S. Highway 36, going west 4 1/2 to 5 miles out from the elevators. It goes out on the road toward Eureka and on Highway 6, to just north of the Mammoth Filling Station.

It was found on the railroad only about 3/4 mile in each direction from the elevators. There is a spotted infestation on the range land north of Highway 36. Main infestation is south of Highway 36. The infested area would take in a little more than one township or about 10,000 acres. It appears that livestock and vehicles have spread it. It isn't likely to go out on desert ranges because growth is made late. We need not be too alarmed about it on the range. However, it is of concern in crop seed. It apparently will compete with, but not crowd out, native vegetation on foothill ranges. It is relatively unpalatable, but livestock will utilize it where they are forced to do, due to a lack of anything better. The plants are difficult to distinguish from ditch aster and wild lettuce.

Reports of county surveys were made as follows: Juab County - Ray Burtenshaw. Their survey agrees with that of Wayne Cook's except they found it all the way to Eureka and a little beyond.

Tooele County - Ernest Biggs. Reports were received of it in two locations, but investigation of these proved them false. The only place they found it was about two miles inside the Tooele County line on Highway 36.

Millard County - Rodney Rickenbach. Considerable time had been spent driving in a car and making spot checks, but none was found.

Utah County - S. R. Boswell. None found except on edge of county north of Eureka.

Dr. Carl Frischknecht asked the group to discuss now what should be done including educational work. Ariel Jorgensen stated that he felt we should inform those who operate in the area such as the stockmen, etc.

Rodney Rickenbach posed the question: Just how serious is the problem? Some discussion of this followed.

Bernard Ellison stated that the seed trade doesn't seem to be worried about the adverse publicity it might bring.

Ariel Jorgensen reminded the group that we need to take a practical approach to the problem. The land owners have the first responsibility.

D. C. Tingey was asked to tell about the characteristics of the weed and what methods are recommended for its control. He stated that we know it is a deep-rooted and probably long-lived perennial. Burs or seed heads are carried and are believed to be the main means of propagation. As to control methods, we do not know yet but it is believed that it can be controlled fairly easily on crop land by clean cultivation for two years. There is a question as to practical methods of control on range land. The spraying done this year with 2,4-D prevented seeding but as yet it isn't known what success was obtained in killing the roots.

The proposed research is: Study the plant and its habits. Study the need as to germination and length of time it will remain viable.

Trials on determining the effect of tillage including deep tillage and regular clean cultivation; The effect of the different chemicals at different stages of growth, rate and kind; The actual cost to clean the weed up by different methods; Study re-seeding or how to replace the present weedy vegetation with more desirable vegetation.

Ariel Jorgensen again asked for recommendations as to what should be done and considerable discussion followed.

Bernard Ellison stated that it is still too soon to decide on a quarantine. We need research on practical methods of control.

D. C. Tingey pointed out that this problem emphasizes the need for a rather complete weed survey in the state. The question is, how much of a problem is this weed likely to be?

One of the Juab County Commissioners stated that they did not want to spend public money on control until we have determined the best methods and can have an effective program. Let's conduct our research before we go out on a large scale program.

Elain Robinson said he would like to see the main area quarantined to keep livestock out. A discussion followed as to a practical way to control livestock.

Judge Hoyt stated that he thought we should consider eradication now, before it spreads further.

Dr. Wayne Cook asked to express his own personal opinion and recommended the following: Be practical and allow research to precede any drastic measures. For the present, follow a program of suppression and prevention of seed production by plowing the tillable land, spray roads and railroads. A committee should be appointed to work out details. The group should meet again next summer or fall to appraise the accomplishments and plan a program for the next year.

Motion by S. R. Boswell and seconded by Dick Robertson that a committee be appointed for this purpose. Motion carried. Each agency agreed to appoint a representative to this committee.

Ariel Jorgensen was appointed chairman of this committee and agreed to call the group together in the near future to work out some recommendations.

Meeting adjourned at 4:30 p.m.

Minutes taken by Louis Jensen