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An Analysis of County and Community Resources Available for Social Studies and Science Classes in the Bisbee, Arizona, Area

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222

AN ANALYSIS OF COUNTY AND COMMUNITY RESOURCES AVAILABLE
FOR SOCIAL STUDIES AND SCIENCE CLASSES
IN THE BISBEE, ARIZONA, AREA

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

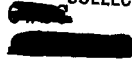
In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Lulu G. Smith
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TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM AND DEFINITIONS OF TERMS USED . . .	1
The Problem	1
Statement of the problem	1
Assumption	1
Method	2
Limitations of the Study	2
Definitions of Terms Used	3
Social science	3
Social studies	3
History	3
Science	4
Community resources	4
Field trips	4
Overview of Remaining Chapters	4
II. REVIEW OF THE LITERATURE	6
History of Field Trips	6
The Value of Community Resources	8
Types of Community Resources Adaptable for	
Social Studies	12

CHAPTER	PAGE
Use of Community Resources in Science Classes . . .	14
Precautions in the Use of Community Resources and the Organization of Field Trips	16
Evaluation of the Results of Using Community Resources	24
III. COCHISE COUNTY AND BISBEE, ARIZONA, HISTORY IN RELATION TO COMMUNITY RESOURCES	26
A Brief History of Cochise County	26
History and Background Information of the Bisbee, Arizona, Area	31
Units of Study in Which Resources Can Be of Value .	35
IV. METHODS AND PROCEDURES	38
Procedures Used in Study	38
Survey of local residents	38
Survey of other sources	39
Resources Discovered	40
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . .	42
Summary	42
Conclusions	43
Recommendations	44
BIBLIOGRAPHY	46

CHAPTER	PAGE
APPENDIX A. Parent's Consent to Field Trip	50
APPENDIX B. Copy of Letter Written to Keith Jackson, Cochise County Superintendent of Schools	51
APPENDIX C. Questionnaire: Community Resource Persons	52
APPENDIX D. Resource Worksheet	54
APPENDIX E. Informational Listing of Cochise County Resources that May be Used for Field Trips to Enrich Social Studies	55
APPENDIX F. Informational Listing of Community Resources Useful for Field Trips to Enrich Social Studies	85
APPENDIX G. Persons with Broad Travel Experience Available for Resource Purposes in Social Studies Classes	121
APPENDIX H. Persons Having Historical Knowledge Available for Resource Purposes in Social Studies Classes	133
APPENDIX I. Cochise County Resources that May be Used for Field Trips in Science Classes	135
APPENDIX J. Community Resources to Enrich Science Classes	149
APPENDIX K. Resource Persons with Scientific Knowledge, Hobbies, or Collections	156

CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

Some schools in the Bisbee, Arizona, area make limited use of county and community resources. It is believed that if the schools had a better knowledge of the county and community resources available for use and of their accessibility, more use would be made of these resources. It is further believed that the use of such resources enriches the curriculum, develops student interest in the fields of social studies and science, and creates better community relations.

I. THE PROBLEM

Statement of the Problem

It is the purpose of this study to determine some county and community resources available for use in the social studies and science classes of the elementary schools in the Bisbee, Arizona, area.

Assumption

The Bisbee, Arizona, area has many resources which could be available for use in social studies and science classes in the elementary schools.

Method

The descriptive method is used in this study. Resources discovered have been examined and reported as they exist.

II. LIMITATIONS OF THE STUDY

This collection of resources is not a complete list of all resources, but it is a report of those known to exist at the present time. The collection will need to be revised whenever changes in the availability of listed resources occur or whenever new resources are discovered.

All the uses of the resources gathered in this study are not mentioned. Teachers will need to decide for themselves whether the listed resources would be worthwhile in their situations. Also, social studies and science resources overlap so much that it is difficult to tell where one leaves off and the other begins. Here again, teachers will need to evaluate and decide which resources would be suitable for their particular group. They will need to choose those resources which are pertinent, helpful, and of easy access. All aids to learning have certain limitations which would make them unwise under certain conditions. For example, if the specific purpose of a certain group of students was to find out more about copper mining, it would not be of much value to visit archeological diggings.

In like manner, most of these resources listed have limitations for use. These limitations depend on the particular group of pupils, their characteristics, maturity, interest, and the specific purposes of the group.

III. DEFINITIONS OF TERMS USED

Social Science

The branch of knowledge dealing with the various phases of human society, relationships, and institutional organizations concerned with human existence.

Social Studies

That part of the social science subject matter dealing with human relationships on the elementary level. It is the field of studies dealing with civics, history, and geography which make up a part of the school curriculum.

History

That part of the social science subject matter dealing with or giving a narrative of past events showing those events as steps in the sequence of human activities.

Science

That part of the school curriculum which deals with the biological and physical sciences, such as sea life, soils, rocks and minerals, stars, etc.

Community Resources

Those things in the community outside the schools which have educational value for the schools as libraries, museums, courts, parks, banks, industries, etc. Outstanding individuals, their collections, and other human resources would be included.

Field Trips

A school walk or trip arranged by the teacher or another school official for educational purposes. Field trips are especially designed for study and learning on the part of the students.

IV. OVERVIEW OF REMAINING CHAPTERS

Chapter II of this study presents briefly a review of the literature related to (1) the history and value of field trips, and (2) the problem of community resources, their use and value in social studies and science classes.

Chapter III reviews some of the history of Cochise County and the Bisbee, Arizona, area in its relation to county and community resources.

In the first part of Chapter IV, the procedures used in this study to locate county and community resources which would be of value in social studies and/or science classes are explained. In the last part of the chapter, the reader is referred to appendices containing a categorized, expanded, informational listing of the discovered resources.

Chapter V contains the summary, conclusions, and recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

Most books dealing with social studies methods advocate the use of community resources. Some books go into detail while others make only brief mention of such resources as an aid in teaching the social studies.

Some science curriculums point out that the use of community resources enrich that subject.

This chapter presents (1) a limited amount of the history of field trips, (2) the value of community resources, (3) types of community resources adaptable for social studies, (4) use of community resources in science classes, (5) Precautions in the use of community resources and the organization of field trips, and (6) evaluation of the results of using community resources.

I. HISTORY OF FIELD TRIPS

Taking excursions or field trips to get first hand information is not a new or modern development. Some teachers in all ages have supplemented their teaching by having their students secure a part of their knowledge by the use of excursions (14:404).

Historically the school excursion may be connected with the wandering and begging students of the middle ages. The distinct educational value of travel was recognized by most writers on education of the sixteenth and seventeenth centuries . . . (20:542).

Rousseau's philosophy of education, which emphasized teaching through nature, included field trips and school journeys.

The German educators recognized the value of field trips and made excursions a part of their educational system in the nineteenth century. Such school journeys became popular and spread to Asia (15).

We are told that before the last world war it was a common sight to see groups of children going on excursions. Some of these trips might be but a few minutes in length, or they might last for several hours (4:73-74).

Occasionally the excursions took up to several days. This would not be advocated at the present time due to the dangers involved in our modern ways of transportation, the expenses of such a trip, and the time lost from necessary schoolroom activities.

In England in 1911, school journeys were in the following groupings:

1. Sightseeing: Contacts with municipal and official organizations and friendly exchange of social contacts with local schools.
2. Walking tours, using youth hostels affording a more intimate contact with foreign youth similarly engaged.

3. Group exchange of pupils: Foreign children living in English homes and attending English schools with their hosts for three or four weeks and returning to their own land with their hosts for a similar program. Such contact for six to eight weeks gives opportunity for language practice and better comprehension of social conditions.
4. Grouping of parties from different countries in camps and hostels.
5. Individual exchange (8:541-542).

After World War I, field trips in Europe declined but were revived in the 1920's.

Field trips in the United States are usually rather short. Where schools have undertaken them, the results have usually been satisfactory.

Branom tells us:

During recent years youth hostels have been opened in certain sections of the United States Since most school excursions in the United States are seldom more than a few hours long, very little use has been made of the hostels by our schools. However, the time may come when it will be a common occurrence for children in the high school and in the seventh and eighth grades to spend more than one day on an excursion away from home (4:74).

Since few community activities can be brought into the school, students should be taken to the activities. This is the reason field trips were developed.

II. THE VALUE OF COMMUNITY RESOURCES

True education makes use of all the processes and means by which the child develops attitudes, abilities, and desirable forms of behavior which will be of value to him. It fits the child for his future

place in society. To educate the "whole child," use should be made of available resources which would aid in such development.

Numerous values can be gained from the use of pertinent resources. According to Wesley (38), the community is "the epitome of the world." Here are to be found things from the past and present.

The community is the setting in which the child lives and learns; in it he develops the meanings and concepts essential to an understanding of group living; in it he experiences life in a democracy. The experiences he has in church, stores, theaters, home, neighborhood, and school become his background of meanings for study, thought, and expression The local community is the maturing child's laboratory for learning about man's way of living.

Some of the richest instructional resources for the social studies can be found in the local community (25:221-222).

Thus it can easily be seen that field trips are an aid to understanding and interpreting life in the community and in other communities which the child may read about.

The use of the community as a laboratory for teaching also offers the school an excellent opportunity to build better relationships with the public. As teachers and parents work together to locate materials and opportunities for field trips, both groups will develop better appreciation of each others' problems (39:130).

Although a few teachers have through the years used community resources in their teaching, there are still many who do not, perhaps in many cases because a list of people and field trip possibilities are not readily available (39:133).

Community resources are thus important to the schools. The use of them helps round out the education of the child in a total situation. To do this, schools should investigate meaningful resources and thereby

enrich their curriculums. In this way, a variety of learning experiences would be provided.

One educator (13:219) claims that resource materials are a means to an end. This educator says, too, that these resource materials are able to enrich the environment in which learning takes place. Children's curiosities are thus stirred and satisfied. They gain a broader knowledge which is an aid to them throughout life.

The American Educational Research Association reported:

Howell, comparing the use of filmstrips with field trips in teaching factual knowledge about the dairy and how a newspaper works, found the field trip to be significantly more effective And the addition of the filmstrip to the field trip was even more effective (32:164).

Horn states:

Those teachers who look upon excursions as a form of play do not understand the value of learning through concrete experiences. Neither do they realize the community can furnish many of the experiences that children need in their schoolwork. When they were children and went to school, their work was based almost entirely upon books. Likewise, they still believe that almost all knowledge is obtained from books Those teachers who think they have no time for excursions because they have so much work for their pupils to do, would be surprised to learn that well-planned excursions lighten the work in place of making the work heavier (14:73).

Excursions have a great many values. Horn says further:

(1) They form a connecting link between the school and community and arouse pupil interest in school. (2) They provide definite information from first hand observation. (3) They arouse interest and vitalize school life and school problems. (4) They provide common experiences for all children. (5) They develop worthwhile attitudes and better understanding between a teacher and students.

(6) They develop a sympathetic understanding of the problems and social contributions of various vocations (14:409-410).

When community resources are incorporated into the curriculums of schools, the people of the community learn to know their resources and make more use of them. Children enjoy social studies and science more when community resources are used from time to time. Usually there is a better feeling between citizens of the community and the school.

Edgar Wesley, former Associate Professor of Education at the University of Minnesota, has this to say regarding local materials:

The pupil who fails to identify the local counterpart of what he studies in a book is failing to utilize the most promising materials. In fact, his learning is not complete or functional until he is able to complete the cycle by realizing that the local instance is the reality that he has studied in the textbook. The local community thus furnishes the standard of achievement as well as the laboratory of materials (39:432-433).

One authority says regarding the value and the use of field trips:

Field trips and the use of the community as a living textbook will educate the teacher as well as his students. The teacher is not expected to be an expert in every subject which a class might discuss. The teacher today is a specialist in children. He knows how to plan effective learning experiences for modern methods to best advantage. Thus the good teacher knows that in any community there are many people who have skills and talents he does not possess. Photographers, stamp collectors, travelers, farmers, mechanics, doctors, clerks, craftsmen, and a host of others can make valuable contributions to education in the classroom. It only remains for the school to let them know that they are needed and to inform them how they can be of assistance (40:132).

As children grow older, more and more of their interests tend to lie outside their homes and schools. The teacher, by having the children

take field trips, is guiding their community living toward specific objectives.

One educator states:

As an extension of classroom instruction and of textbooks, excursions constitute a valuable supplement, since they furnish innumerable opportunities for concrete experiences which give life to school instruction (17:748).

III. TYPES OF COMMUNITY RESOURCES ADAPTABLE FOR SOCIAL STUDIES

According to Ernest Horn, sources providing concrete experiences might be:

(1) Objects, models, and museums, (2) excursions, (3) constructive activities, and (4) direct participation in community enterprises (14:393).

Community resources are summed up by another educator as follows:

The resources of a community can be divided into (1) physical phenomena such as hills, soil, roads, factories, mills, books, museums, and other material things and places which can be visited; (2) social institutions such as families, parties, courts, unions, teams, and clubs; and (3) such intangibles as customs, ideas, beliefs, traditions, and attitudes (38:382).

Local communities usually have available many of the fundamental interests discovered in social studies classes. However, some of these resources will vary in different communities. Ragan says in regard to them:

Community resources are a convenient and valuable asset to the enrichment of elementary social studies. The variety and convenience of such resources will vary from community to community (31:290).

The following is a list of community resources which might be used by elementary school social studies classes (31:291):

Local History

Names of persons, places, streets, buildings
Memorials, statues, relics
Pioneer utensils, furniture, clothing
Spots of historic interest
Old records, discarded primitive machines

Local Geography

Land and water forms
Nearby bodies of water
Climate, soil, products
Native birds, animals, plants, trees
Natural resources, minerals, oil, coal

Local Institutions

Museums, libraries, fairs
Homes, churches
Hospitals, clinics, dispensaries
Educational institutions
Press, radio, motion pictures

The People and the Community

Workers and the work they do
Scientific inventors
Artists, musicians, authors
People with hobbies

Local Government and Its Services

Treasurer's office*

Assessor's office*

Recorder's office*

Sheriff's office*

* Added to the list by the writer

IV. USE OF COMMUNITY RESOURCES IN SCIENCE CLASSES

Probably no subject offers greater promise for development in elementary schools than does science. Science is important because it supplies information which is useful in daily life. It not only explains about little things, as a drop of water, but it also teaches about larger things--as the universe of stars. Science interprets the environment and man's relation to it. Nature and science are not separated in the elementary school, so things in the universe and in the environment have a very definite meaning to the children.

In the field of science, many community resources can be found which will enrich the child's scientific background and reinforce learnings.

According to the 1943 Kern County, California, school guide (21:5), science holds an important place in the social studies. More emphasis was being placed on American life and "more time and thought was devoted to the study of community resources and needs."

The Kern County schools advocate field studies in science by taking field trips. The Kern County Guide reports that during a sixth grade nature study:

Twenty minute excursions were made as frequently as twice a week. Observations were not limited to animals but included insects and vegetation as well. In our location we seldom went far from the school grounds since much of our quarry lived close by, and we could observe at hand our animals in their native habitat (21:168).

Some community resources applicable to science are:

1. Areas of wild-life.
2. National parks and city parks
3. Areas of special rocks and minerals
4. Museums and zoos
5. Areas of varied soils
6. Mines and quarries
7. Rock shops and rock collections
8. Flower gardens
9. Vegetable gardens
10. Wild flower locations
11. Oil refineries
12. Areas of various types of weeds and/or plants
13. Lava beds
14. Bodies of water
15. Land and water forms

16. Fairs and exhibits
17. Resource persons
18. Green-houses and their plants and shrubs

V. PRECAUTIONS IN THE USE OF COMMUNITY RESOURCES AND THE ORGANIZATION OF FIELD TRIPS

Wesley and Adams state:

The teacher's function is not to guide her pupils through all the aspects of the community but to find and select for study those which have educative values. She must therefore remember the limitations of elementary pupils and select those which are pertinent, convenient, and helpful (37:386-387).

A number of important things that teachers should remember when contemplating field trips are brought to view by Branom (3:75-83). Field trips that are properly conducted give pupils experiences in working and planning together. Leadership and responsibility are developed. Students learn to listen to others and follow directions. Branom says that teachers need to know the community well. Sometimes it is necessary for the principal to obtain permission for the teacher and the class to visit certain places. Teachers should find this out ahead of time.

Arrangements for field trips should be made several days before the trip is to be taken. The proposed trip should be talked over with the principal and his permission obtained.

The teacher should visit the place or places to which the trip is to be taken to see what the conditions are and to orient the pupils as to what they need to look for on the trip. In case there will be a guide available for the trip, the teacher should tell him the purpose of the trip. The guide will then be of greater value, for he will be more apt to use language the children can better understand.

Before taking the trip, the teacher must be sure that it will be safe for the children to visit the place. Branom warns:

The teacher must always remember not to take her pupils to any place where there is danger of some child being injured.

The teacher should obtain permission to take his class to visit a certain place on a given date from the manager or the person who is in charge. Proper arrangements should be made so that everything will be ready for the class when it arrives (3:77).

Usually whenever a teacher takes a class on a field trip or an excursion, he should secure the parents' permission. Parents should know where their children are at all times.

Since there is always an element of danger involved in any excursion, the consent of the parents must be obtained. Then if there should be an accident, the parents should not hold the teacher responsible. The teacher must remember that the parents have trusted the care of their children to him and he must keep the idea of safety in mind at all times (3:78).

The parents' consent should be in writing. The teacher should have a mimeographed form which he fills in with the necessary explanations

and data. The students can take the form home to be signed by their parents. (See Appendix A.)

It is necessary to inform the parents of the following:

1. Time of departure and time of expected return.
2. Cost of the trip to the pupils, if any.
3. Mode of transportation.
4. Whether a lunch will be needed--also, where it will be eaten.
5. The route to be traveled.
6. Type of clothing to be worn.

Teachers must make sure that responsible persons are in charge of transportation if school buses with their regular drivers are not used. All cars must carry proper accident insurance.

Pupils need to be thoroughly prepared for the trip to have an efficient learning experience. Their interest should be fully aroused. Committees should be appointed to work with the teacher in planning the trip. The teacher and children should make a list of things to be observed during the trip.

The following is a guide which would be of value when planning for field trips:

1. Contact the organization well in advance to make arrangements:
 - a. Ask for name of person in charge
 - b. Find out at what age children are permitted to visit.

- c. Find out how large a group can be accommodated at one time.
 - d. Determine exact time of visit.
 - e. Will a special guide be available?
 - f. Could guide's talk be recorded on tape?
 - g. Will it be permissible to take pictures?
 - h. Will printed materials be available?
2. Make arrangements with school administration:
- a. Ask permission of the principal.
 - b. Make arrangements for transportation.
 - c. Plan for adequate number of parents to help.
3. Purpose of the trip:
- a. Be sure trip is for specific purpose.
 - b. Be sure it correlates with school studies.
 - c. Plan goals to be reached with class.
 - d. Establish rules of conduct.
 - e. Plan a follow-up evaluation.
4. Parent consent:
- a. Send home a written notice explaining purpose of proposed trip.
 - b. Give exact time of departure and return.
 - c. State type of transportation.

- d. Cost of food or other expenses, if any.
- e. Type of clothing to be worn.
- f. Obtain written permission of the parents.
- g. State any other necessary details.

Some teachers may feel that the above guide is relatively unimportant, but Ernest Horn in Methods of Instruction states:

The greatest value is obtained from excursions that have been carefully prepared for in the regular work of the school, through readings, discussions, and, in case some industrial process is to be observed carrying out parts of the process in a simple way in the classroom. For example, the value of a visit to a woolen mill is enormously enhanced for students who, as a part of their classroom work, have actually carried out in a simple way, the processes of washing, carding, spinning, and weaving (14:411).

It would be better never to have a field trip than to have a poorly planned one. Good planning will make the field trip an enjoyable and educational experience.

Every field trip should have an educational purpose. To achieve the desired purpose, careful pre-planning must be done. The students should be included in this pre-planning so they will realize their responsibilities better.

Any parents who accompany the group on the trip should understand the major purposes to be achieved. Specific instructions should be given them regarding ways they are to help. For example, if they are responsible for a group of eight children they should learn the names of the children in their group and carry out specific directions regarding standards and regulations that have been set up. The parents should be introduced to the children for whom they are responsible and the children should understand how they should help on the trip (25:217).

Resource persons brought into the school room are valuable aids in presenting worthwhile information. They can be utilized in the fields of social studies and science. They should be able to speak before a group and express themselves well.

A good check list to set up in regard to a good resource visitor might be the following given by Grambes, Iverson, and Patterson (11:206):

1. Is he interested in pupils or education or does he have a negative attitude toward young people?
2. Does he ordinarily speak in an overly academic fashion?
3. Does he ramble and constantly get off the subject?
4. Is he a jokester?
5. Does he express strong prejudices?
6. Will students confuse or offend him?

Every community should be canvassed to determine what persons should be asked to share their experiences with the children in the classroom. A childhood spent in Norway, Italy, Greece, or elsewhere should produce an adult whose reminiscences would not only interest the children but increase their understanding of how others live. Early pioneers can unfold for them the stories of their adventures. A farmer can explain why and how he fertilizes the soil, rotates crops, cares for the seed, and does many other kinds of work necessary to the production of food. The dairyman, the grocer, the butcher all can give greater meaning to their respective tasks (38:9).

Jarolimek, a noted social studies educator, makes this statement:

The teacher must always select with care the persons who are invited to spend time with the class in the name of instruction. Some people should not be asked to speak to children because

they are not able to make themselves understood, they lack an understanding of children, they hold and express freely attitudes or beliefs which may be offensive to members of the group, or fail completely to grasp the significance of their visit to the class. The teacher should plan to spend some time with the visitor sufficiently far in advance of the visit to brief him on the activities of the class, the purposes of his visit, and the points to be discussed and stressed in the visit. Likewise, the children must be prepared for the visitor, listing the purposes of his coming, questions they should like to ask, and general courtesies extended to classroom guests. Handled in this manner, persons from the community can make a positive contribution to the instructional program in the social studies (17:119).

Another educator says:

Before resource visitors come, plans should be made which will enable the class to gain the most from the experience:

1. Brief the visitor ahead of time (Give him a list of student questions.)
2. Prepare an introduction.
3. Request permission to interrupt.
4. List questions on the board.
5. Use a group interview.
6. Prepare the class for the visitor (11:207-208).

In most cases, it would be best to have no class discussion or evaluation of the visitor. The pupils and teacher should always remember to send a letter of appreciation to the visitor for the service which he gave.

Mary Willcockson in her discussion of resources has this to say regarding resource persons:

When people from the community come into the classroom, they not only help to make teaching more worthwhile but they

also get a closer look at the school Many lay people are self-conscious about talking to students. A great deal can be done to ease the situation if formal talks and lectures are kept to a minimum and the emphasis placed on informal discussion and demonstration (40:132-133).

Michaelis suggests an interview as a valuable means of gathering information in certain cases in which a resource person is unable to come to the school. An interview can be conducted by a small group or by an individual child. Plans should be made by the teacher and pupils to decide what standards should be set up. The following standards listed by Michaelis serve as an aid for interviews:

1. Introduce yourself.
2. State questions clearly.
3. Listen attentively.
4. Let the other person talk.
5. Ask questions on special points.
6. Take notes on hard points.
7. Don't waste time.
8. Express thanks when finished (26:224).

Interviews should be evaluated just like field trips. Children thus learn the importance of accurately reporting the facts and other learnings gained from their experience to the rest of the group.

VI. EVALUATION OF THE RESULTS OF USING COMMUNITY RESOURCES

When the students return from the field trip, there should be a discussion period. During this time, the pupils have the opportunity of asking questions about anything they did not understand. Also, they should be allowed to contribute learnings which they gained from the trip.

Ernest Horn expressed himself on the subject of field trip evaluation as follows:

Any excursion worth taking is worth spending time on after it is over. At least one period should be spent in discussing it. The information gathered should be used to solve the problem for which the excursion was undertaken. If it has been a success, there will be many questions to talk over. Care must be taken, however, to see that the activities that grow out of it are clearly needed. Excursions are sometimes made unpopular by burdening the students with so many subsequent tasks as to lead them to look forward to the next excursion with very little enthusiasm (14:412).

As children evaluate their learning experiences and plan ways of improving those experiences, self-direction and independence are developed which will be of value all through life. It is wise for pupils and teacher to make a summary of what was learned.

One social studies teacher feels that tests are valuable after a field trip:

Tests may be given after the pupils return from an excursion to check some of the chief points which the pupils should have learned. These may include both the essay type and the new

type test. Pupils enjoy answering the true-false test, the completion test, the matching test, the multiple-choice test, and other forms of the new type test when the results are used wisely by their teachers (4:81).

The excursion may call for various reports. There may be group reports or individual reports. These may be written or given orally Possibly some questions are raised that require the reading of special references. One important function of an excursion is to raise questions for further study (4:81).

In real life situations, there should be constant evaluations. Field trips are surely real life situations. These should be evaluated according to the purposes which were set up by the students and teacher previous to the field trip.

Evaluating an experience is an aid in indentifying the defects or failures. It helps the teacher know what learnings the group received. Also, it will enable the teacher and the pupils to plan wisely for future field trips.

The field trip will have provided for oral and written language, art activities, dramatization, social studies and/or science learnings, and other worthwhile summarizing activities.

CHAPTER III

COCHISE COUNTY AND BISBEE, ARIZONA, HISTORY IN RELATION TO COMMUNITY RESOURCES

To choose resources which will be of most value to students, it is well to know a little of the history of a region. Some of the history of Bisbee and Cochise County is mentioned by the writer not only because history is one branch of the social studies, but also because one should know the history of an area to understand its development or non-development. Many of the resources which were found help portray the history of Bisbee and Cochise County.

This chapter will present (1) a brief history of Cochise County, (2) historical and background information of the Bisbee, Arizona, area, and (3) units of study in which resources can be of value.

I. A BRIEF HISTORY OF COCHISE COUNTY

Cochise County, ninth in size among Arizona's counties, lies in the southeast corner of Arizona, bordered by New Mexico on the east and the Mexican State of Sonora on the south. It was created February 1, 1881, and was named after the Chiricahua Apache Indian Chief, Cochise.

Encompassing 6,256 square miles, or 4,003,840 acres, most of the county lies in a 3,000 to 6,000 foot elevation range on the western slopes of the Continental Divide. It is a county of vast

agricultural valleys, rolling rangeland and lofty mountain ranges, a land of temperate climate without extremes of heat or cold (2:3).

The area of Cochise County would contain the states of Connecticut and Rhode Island and still have thirty-three square miles to spare.

Though Cochise County is in the southern part of the state, it is not essentially desert. There is much of interest in the county which will hold the tourist for days, weeks, and even months.

The early recorded history begins with the explorer Don Francisco Vasquez de Coronado. In 1540, eighty years before the Pilgrims landed at Plymouth Rock, Coronado crossed from Mexico into what is now Cochise County. Searching for the "Seven Cities of Cibola," he entered the county at what is now Naco, just south of Bisbee. From there he went north to the headwaters of the Little Colorado River to Cibola country. The seven cities turned out to be Zuni villages near what is Gallup, New Mexico, today (2:3). Coronado and what was left of his once great army returned to Mexico City after they discovered that the tales of fabulous hoards of gold were untrue.

It is ironic that when Coronado and his army first entered Cochise, they camped on the San Pedro River near the future townsite of Tombstone--whose mines were later to disgorge millions of dollars worth of silver, a sum far greater than Coronado could have ever dreamed of finding in the Seven Cities of Cibola (2:3).

Also, he never suspected that treasure lay buried beneath the limestone hills of the Bisbee area some fifteen miles away. This treasure was worth hundreds of millions of dollars in the form of copper, gold, and silver.

The California Gold Rush was responsible for the development of the southern route of the Butterfield Stage Line from St. Louis to San Francisco. In 1858, Benson on the San Pedro River became a stage stop and Fort Bowie was built in 1862 to protect the travelers from the Apaches under Chief Cochise. Cochise finally made a lasting peace with the white men. This was due mainly to the efforts of Tom Jeffords, whom Cochise made his "blood-brother."

After Cochise died in 1874, a small band of renegades led by Geronimo continued their raids of pillage and torture, preying on the settlers. In the spring of 1877, Camp (Fort) Huachuca was established to protect the settlers from the Indians. The early settlement of Mahley was re-named Willcox in 1880 in honor of Orlando B. Willcox, one of the American generals (2:14).

Ed Schieffelin, a government scout, saw a glint in an overturned rock. Upon checking it, he found it to be silver. Later at Fort Huachuca he told an Indian fighter, Siever, that he was going to quit the government and go prospecting. Siever warned Schieffelin that all he would be able to find would be his tombstone. Ed Schieffelin remembered that taunt

when he later filed a claim on what he called, "Tombstone Mine."

The discovery of silver started the greatest silver rush in United States history, and soon Tombstone grew to be a city of 15,000 people. Tombstone was a most lawless town--a town practically "too tough to die" even though many disasters took place. Thus it was natural in 1881 when Cochise County was created that Tombstone be chosen the county seat.

However, the real story of Cochise County was the story of copper. Jack Dunn, an army scout, and George Warren, a prospector, found copper which was to make the county one of the nation's greatest copper producers and Arizona the leading copper state.

Cochise County also has produced 22 per cent of Arizona's output of gold, 38 per cent of the silver, 32 per cent of the lead, and 27 per cent of the zinc. The Warren (Bisbee) District produced 94 per cent of the total value, including practically all the copper. The Tombstone, Cochise, and Turquoise Districts produced over 90 per cent of the balance. The remainder came from Doz Cabezas, Tevis, Swisshelm, Huachuca, Middle Dragoon, Whetstone, and a few smaller districts (2:6).

Jack Dunn was the man who found the first copper in the canyon known today as Bisbee. Cochise County is rich in minerals and the mining industry is expected to last for many years to come (2:7).

Many towns are but ghost towns today. But even in the ghost towns one can read some of the past history of the county and its early settlers. Quite a number of relics of the early days remain. Old

buildings have been restored, historic sites have been labeled, and many articles, utensils, and pictures are preserved in museums.

It seems that more and more people have discovered the mild year-round climate, for during the past ten years the population of Cochise County has doubled.

Cochise County has ten mountain ranges, while an eleventh is shared with Hidalgo County, New Mexico. In these mountain ranges, many semi-precious gems and minerals reward diligent "rock hounds." Mountain trails invite the hiker and horseback rider (22:4). The mountains are a good place for the study of birds, animals, and plant life.

There are two national monuments in Cochise County: Old Fort Bowie in the Dos Cabezas Mountains and the Wonderland of Rocks in the Chiricahuas. In 1952 the Coronado National Memorial was established which commemorated the coming of Francisco Coronado and the Spanish Conquistadores in 1540 (2:14).

Old Fort Bowie is a landmark of the Apache Indian wars. From here Geronimo and other Apache leaders and warriors were sent to confinement in Florida, thus bringing to an end the Apache wars.

Cochise County has heard the trumpets from Old Spain, the war cries of the Apaches, the bugles of the United States Cavalry, and the sound of blazing six-guns.

Although mining, as mentioned previously, is of import, it was the rangelands which probably brought the first settlers to the county. Some of the present cattle ranches date back to the original Spanish Land Grants. The largest agricultural enterprise is the production of beef cattle. Over 2,300,000 acres of land, besides that of the forest permits, are used for range cattle. The raising of hay, grains, and silage in the Kansas Settlement and the Willcox areas aid the cattle business to such an extent that Willcox is known as the "Cattle Capital of the World" (2:9).

In the Kansas Settlement and the Stewart areas near Willcox, lettuce is becoming an important crop. Cotton, also is rather important. This is the only place where chili peppers are raised commercially in Arizona (2:10).

II. HISTORY AND BACKGROUND INFORMATION OF THE BISBEE, ARIZONA, AREA

In 1881, Cochise County was sliced from Pima County and the pioneers of Bisbee accepted the laws of the new county. No Chinese could make his home in the Bisbee mining camp. Although this was an unwritten law, no Chinese ever attempted to make Bisbee his home.

Bisbee's past is a dramatic story of adventure, fear, faith, and courage. There were many tragedies in its frontier life.

Even during the years of 1884-85 when the frightening and discouraging news swept through the canyon that the rich ore was exhausted, the pioneers and mining engineers would not say die.

Bisbee's story is the true story of those wonderful men and women who dared and endured life during a hectic area ravaged by vicious Apaches, damaging floods, and an earthquake. Those pioneers knew what the shortage of food and scarcity of water meant. And they knew fear of death by bandits. Yet, they saw the promise that Arizona had to offer, and it was through their character, integrity, courage, and faith that they started Bisbee on its way to become numbered among the richest of copper mines in the world (6:179).

Before there was a Bisbee, the canyon winding through the hills past Castle Rock was known as Tombstone Canyon. When the town began to grow, the canyon below Castle Rock was given the name, Main Street. An intersecting canyon was given the name of Brewery Gulch. It is said that the principal business of the town was transacted on Main Street and the "monkey business" in Brewery Gulch.

Castle Rock is now the center of the community which extends from upper Tombstone Canyon through Bisbee, Lowell, Bakerville, and Warren--a distance of six or seven miles.

Bisbee is the southernmost mile high United States' city. It is three miles north of the Mexican border and is ninety-four miles southeast of Tucson, Arizona. It is nestled among the Mule Mountains of southern Arizona and is a city that has a mild climate. "Bisbee has the most moderate temperature range in Arizona, varying only 53 degrees between average summer maximum and winter minimum" (2:18).

Bisbee is an important mining town located in one of the richest copper districts of America. Due to the fact that the town is built in a canyon, the houses cling to the slopes on either side of the canyon. It is said that there is no home delivery of mail in Bisbee because it is too hard for the postman to climb up and down the canyon.

During the rainy season of summer, water roars down the mountain gulches including Brewery Gulch. Two persons are supposed to have lost their lives by drowning not far from the Bisbee post office. However, flood control work has been done to such an extent that this danger has been eliminated.

In 1930 a county-wide election was held to decide on the location of a new courthouse. Bisbee was chosen over Tombstone and Douglas and is now the county seat of Cochise County.

Bisbee is the center of the population concentration of the county. Within a thirty-mile radius are the communities of Douglas, Sierra Vista, Fort Huachuca, Tombstone, and Elfrida, comprising a population of about 45,000 people. Bisbee is the trade center for southern Cochise County. In it are the leading retail chain stores as well as over two hundred independent home-town merchants.

The area is rich in history and scenery. When names such as Brewery Gulch, Tombstone Canyon, Laundry Hill, O K Street, Quality

Hill, The Glory Hole, and Castle Rock are heard, the story of a rugged past arises in one's mind.

There are five public elementary schools, a high school, and a junior college. Besides these are a Catholic elementary school and a Seventh-day Adventist elementary school.

Over thirty churches are located in Bisbee representing all major denominations (2:19).

The city of Bisbee is on the Copper Horseshoe highway route along which travelers can visit many historic sites and natural wonders. The city is now planning for the electronic and industrial future of Cochise County.

Bisbee is known as Arizona's "Copper Capital." Both an underground and an open pit operation are the result of Jack Dunn's discovery of copper in 1877. Lavender Pit, one of the world's largest open pit mines, is transversed by U. S. Highway 80.

Bisbee was named for a man who never saw the town--Judge DeWitt Bisbee of San Francisco. George Warren had been taken in as a partner by Dunn to work Dunn's claim under an agreement to share and share alike with Dunn and two other mining partners. Due to Warren's taste for drink, he gave away the location of the claim while under the influence of liquor. Besides, he staked fifteen other claims in his own name in the Bisbee area. He sold seven-eighths of each claim to Martin

and Ballard who had been financed by Judge DeWitt Bisbee of San Francisco. Finally, for the sum of \$4,000, Jack Dunn sold his claim and holdings which have since yielded over \$20,000,000.

In 1881, Phelps and Dodge bought up the claims and called their holding "The Copper Queen Consolidated Mining Company." Copper mining has continued in Bisbee to the present time. The copper ore mined in the Bisbee area is sent to Douglas for smelting.

Lavender Pit Copper Mine is one of the world's largest open pit copper mines. Operated by the Phelps Dodge Corporation, it covers an area of over two hundred acres and is still being enlarged.

III. UNITS OF STUDY IN WHICH RESOURCES CAN BE OF VALUE

The National Council for Social Studies (28:30-31) suggests the following units as some of those which would be enriched through the use of community resources:

1. Safety in Our Community
2. Social Welfare in Our Community *
3. Recreation in Our Community
4. Newspapers in Our Community *
5. Government in Our Community *
6. Public Opinion in Our Community
7. Taxes We Pay in Our Community *

* Resources listed in this study are useful in the indicated units.

8. Housing in Our Community
9. Buying in Our Community *
10. Education in Our Community
11. Communication in Our Community *
12. Transportation in Our Community
13. Appreciating Our School
14. Our Community: What It Is *
15. Health in Our Community *
16. Vocations in Our Community *
17. Wealth in Our Community *
18. Politics in Our Community
19. Workers in Our Community *

Other units which might be included in the above list are:

1. Spanish-speaking People of Our Community *
2. Industries of the Bisbee Area *
3. People and Life in Other Countries *
4. Travel in Other Countries *
5. History of Bisbee *
6. History and Settlement of Cochise County *
7. Soils and Rock Formations *
8. Flora and Fauna *

*Resources listed in this study are useful in the indicated units.

9. Our Community's Water *
10. Electrical Power of Our Community *
11. Agricultural Development of Our Community *
12. Mining Development of Our Community *

The use of available resources in the form of field trips or resource persons enrich the curriculum in untold learnings.

* Resources listed in this study are useful in the indicated units.

CHAPTER IV

METHODS AND PROCEDURES

In this chapter the writer will explain the manner in which community and county resources which would be useful for social studies and/or science classes were located.

I. PROCEDURES USED IN STUDY

Survey of Local Residents

A letter was written to Mr. Keith Jackson, Cochise County Superintendent of Schools, to secure permission to conduct this study. (See Appendix B.) Following this, Mr. O. B. Joy, Superintendent of the Bisbee City Schools, was contacted for permission to have the principals of the various schools in the Bisbee area cooperate in the study.

After the principals of the schools had been contacted and interviewed, they consented to pass out mimeographed resource investigation forms to their teachers. The room teachers then passed out the forms to their students, and the students took them home for their parents to fill out. (See Appendix C.)

These forms were brief and took a minimum of time to fill out. There were blanks for the parents' names, addresses, telephone numbers, travel experience, special hobbies, scientific collections, and collections of historical value.

When the children had returned the filled-in forms to their room teachers, the returns were collected by the principal of each school. The writer then collected the completed forms and made arrangements to interview those individuals who might prove to have valuable resources for social studies or science classes, or who would be worthwhile resource persons.

Survey of Other Sources

The writer reviewed a number of social studies books to determine types of usable resource materials. A review was also made of science books and curriculums to determine types of resources which would be of use for enrichment of elementary science classes.

Resource worksheets were made on which to put information regarding community and/or county resources which would be useful in social studies and/or science classes. (See Appendix D.) The county as a whole was then studied for possible resource material. The community, including its stores and other businesses, was explored as well.

Some other methods of determining what resources might be available were: the reading of the history of Bisbee, a careful study of the telephone directory, individual trips for observation of possible resources, checking on further resource information given by discovered resource persons, and interviewing the manager of the Chamber of Commerce.

It is possible that more usable resources and resource persons could be located if further search was made. Teachers may use the form given in Appendix C to aid them in locating resource persons in their school communities.

II. RESOURCES DISCOVERED

Some important industries and businesses have been studied as possible resources to broaden students' knowledge and are listed in this study along with resource persons and places of interest.

Appendix E contains an alphabetical listing of Cochise County resources that can be used for field trips to enrich social studies classes. Each listing contains information pertaining to the effective use of each resource.

Appendix F contains an alphabetical listing of community resources useful for field trips to enrich social studies. Basic information pertinent to the use of each resource is also given.

Appendix F contains a listing of persons with broad and varied travel experiences. Listings of the collections from the areas these persons visited and other pertinent information is also given.

Appendix H. contains a listing of persons having historical knowledge of the Bisbee, Arizona, area. Not as many resource persons are listed as might be expected. However, resourceful teachers may be

able to discover more persons having historical knowledge by using the questionnaire form previously suggested. (See Appendix C.) Some of the persons having historical knowledge are willing to be interviewed by individual students.

Appendix I contains an alphabetical listing of Cochise County resources which would be useful as field trips for science classes.

Appendix J contains an alphabetical listing of community resources which would be useful as field trips for science classes.

Appendix K contains an alphabetical listing of resource persons having scientific knowledge, hobbies, or collections useful in the study of science. This listing may be incomplete, but through personal knowledge or information, talking with other people, and using the resource form suggested in Appendix C, teachers may be able to discover more resource persons who could be available as resource persons for science classes.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

It was the purpose of this study to determine available county and community resources that would be useful in the social studies and science classes of the Bisbee, Arizona, area. The procedure was to (1) determine the types of resources suitable for use in social studies and science classes, (2) determine resources available in Cochise County and the Bisbee, Arizona, area, (3) secure permission to make these resources available to the schools of the Bisbee area, (4) portray the use of community resources through suggested units of study, and (5) gather data for teachers who may wish to make use of Cochise County and the Bisbee, Arizona, area resources.

A mimeographed resource investigation form, distributed through the Bisbee public schools, was filled out and returned by parents of school children. The information obtained by this procedure was studied and arrangements were made to interview those individuals who might be worthwhile resource persons.

Additional resource material was discovered through a survey of the community, a study of the telephone directory, the reading of the history of Bisbee, interviews of resource persons, and other activities.

II. CONCLUSIONS

At the beginning of this study, it was assumed that the Bisbee, Arizona, area had many resources which could be made available for use in social studies and science classes in the elementary schools. After the research was carried out, it appeared that the Bisbee schools have "at their fingertips" many types of the resources suggested for curriculum enrichment by leading authorities in the fields of social studies and science.

During the school years of 1966-68, arrangements were made for school groups to visit a few of the resources listed in this study. It is suggested that future school groups visit as many of the following places as would be practical, to make Arizona history as it applies to Cochise County live in the minds of the students: Coronado National Monument, Fort Huachuca, Tombstone, Cochise Stronghold, Old Fort Bowie, Chiricahua National Monument, Amerind Foundation, Dragoon Spring, Doz Cabezas, and Charleston, the ghost town on the San Pedro River.

The American Cross, The Arizona Bank, The Arizona Public Service Company, The Arizona Water Company, The Mountain States Telephone Company, The Bisbee Daily Review, The Chamber of Commerce, The Cochise County Courthouse and jail, The Copper Queen Library, The United States Post Office in Bisbee, The Lavender Pit Copper Mine, and

The Health Department of Cochise County are well worth time spent in visitation. These resources will help students become acquainted with their town and its services.

It would be well to make use of as many resource persons as possible having varied travel experience, such as T. J. Bresina; Martin Gentry, Attorney; Rex M. Holgerson; John Pintek, Attorney; Mrs. Betty Protheroe; Charles A. Smith, Jr.; Philip E. Toci, Attorney; Mrs. James Whitney; and Paul V. Yingling, M.D.

It is further suggested that use be made of the persons having special hobbies, as listed in Appendix K.

III. RECOMMENDATIONS

As a result of the reading and research done, the writer makes the following recommendations:

1. Lists of resources will need to be continually revised due to changes in businesses and migrations of listed resource persons.
2. Listed resources should be re-evaluated from time to time.
3. Effort should be put forth to locate more resource persons in the Bisbee, Arizona, area.
4. Resources listed in this study should be used by teachers whenever possible, to enrich social studies and/or science.

5. Some resources listed may be used in other subject matter areas; for example, The Arizona Water Company or The Health Department of Cochise County listings could be of use in a unit on Health and Safety.
6. All teachers should locate available resources in their communities which would be useful in several subject matter areas.
7. Teachers should broaden their information regarding the community in which they teach. This might be done through a personal study of community resources.

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APPENDIX A

PARENT'S CONSENT TO FIELD TRIP

PARENT'S CONSENT TO FIELD TRIP *

_____ (Date) _____

Dear _____ (Teacher) _____

I hereby give my permission for _____ (pupil's name) _____
to participate in the field trip to _____ (place) _____
on _____ (date) _____.


I understand that even though every precaution will be taken
for the safety of the group, I will not hold the school responsible for
any accident involving my child.

Signed _____ (Parent's name) _____

APPENDIX B

COPY OF LETTER WRITTEN TO KEITH JACKSON, COCHISE
COUNTY SUPERINTENDENT OF SCHOOLS

Please note:
Personal information has been redacted due to privacy concerns.



Mr. Keith Jackson
Cochise County Superintendent of Schools
Cochise County Courthouse
Bisbee, Arizona

Dear Mr. Jackson:

During the past year I was teaching in a private school in your area owned and operated by the Seventh-day Adventists. This school is located on the Naco Highway.

This summer I have begun work on the Master's program. This is my problem: In cooperation with Central Washington College of Education, I would like to conduct a study to determine the community and county resources available for use in the social studies classes of the Bisbee, Arizona, area.

If you feel that this would be a worthwhile study and would be willing for me to go ahead with such a study, please let me know. I will come in to see you when I return for school duties this fall.

Thanking you for your consideration of this matter.

Sincerely,

Lulu G. Smith

APPENDIX C

QUESTIONNAIRE: COMMUNITY RESOURCE PERSONS

Please note:

Personal information has been redacted due to privacy concerns.



Dear Parents:

In an effort to provide enrichment for the curriculum of the schools in the Bisbee area, a study is being conducted to determine available community and county resources. The specific resources under consideration are those which would be of value for use in the science and social studies classes of this area.

Many of our school patrons and townspeople have worthwhile hobbies, collections, and travel experiences which they might like to share with the schools.

In case you would be willing to share in this study, kindly complete the questionnaire and return it to the school by your child.

Thank you for your co-operation in this study.

Sincerely,

/s/ Lulu G. Smith

(Mrs.) Lulu G. Smith

Questionnaire: Community Resource Persons *

Pupil's Name _____
Address _____
Phone Number _____
Age _____ Grade _____

.

Occupation of Parents:

Father _____ Mother _____

Travel Experience of Parents:

Father: _____

Mother: _____

Collections of Parents: (Stamps, rocks and minerals, etc.)

Father: _____

Mother: _____

Hobbies of Parents:

Father: _____

Mother: _____

* Form adapted from Appendix (9:66).

APPENDIX D

RESOURCE WORKSHEET

COMMUNITY RESOURCE WORKSHEET*

Name of Place of Speaker _____

Address _____ Phone _____

Person to contact (1) _____ Title _____

Person to contact (2) _____ Title _____

Nature of Activity
(Specific description of
educational activities,
contributions, etc.)

The following can be seen:

- 1.
- 2.
- 3.
- 4.
- 5.

Limiting Conditions
(Group size, safety,
hazards, seasonal
factors, etc.)

Time Required

Best Days and Time

Comments

*Form adapted from Appendix (34:82).

APPENDIX E

INFORMATIONAL LISTING OF COCHISE COUNTY RESOURCES
THAT MAY BE USED FOR FIELD TRIPS
TO ENRICH SOCIAL STUDIES

Place: Amerind Museum Foundation, Incorporated

Address: Dragoon, Arizona

Phone: Willcox 585-3003

Person to Contact: Charles C. Di Peso, Manager

Nature of Activity

The following can be seen:

1. Hall of Archaeology
 2. Museums of Indian artifacts
 3. Comparative collection of Indian masks
 4. Regional ethnological collections
 5. Three floors of items
-

Limiting Conditions

Shown by appointment only

Groups limited to 15

No admission charge

Time Required: Approximately two hours

Best Days and Time: Friday, Saturday P.M., and Sunday

Comments: Best exhibit of archaeology and ethnology in Arizona. Primarily a laboratory for archaeological and ethnological problems. It was founded in 1937.

Place: Apache

Location: 25 miles southeast of Camp Rucker; 38 miles north of
Douglas; 12 miles south of Rodeo

Nature of Activity

Reason for Trip:

To see monumental tower denoting
area where Geronimo , Nachite, and
followers surrendered to General
Nelson A. Miles on September 5,
1866.

Limiting Conditions:

None

Time Required: 10 to 15 minutes

Comments: An excellent place to make Arizona history come to life.

Due to distance, it is preferable to visit this resource
on return trip from Rucker.

Place: Appaloosa Horse Ranch

Address: Tombstone, Arizona, 9-1/2 miles north of Bisbee

Person to Contact: (1) Ross Cain Title: Owner
(2) Margeine Caine Title: Owner

Nature of Activity

View Appaloosa horses and gain an understanding of their characteristics and uses.

Listen to Ross Cain's informational talk about Appaloosa horses.

Limiting Conditions

Small groups of 15 to 30

Must obey all safety standards established.

Spring or fall is the preferred time for appointments.

Time Required: About one-half hour

Best Days and Time: Write for appointment

Comments: Very worthwhile for students in high school who are taking agriculture. Also valuable for seventh and eighth grade social studies groups.

Place: Boot Hill Graveyard and Novelty Shop

Address: Tombstone, Arizona Phone: 457-3512

Person to Contact: Boot Hill Cemetery Novelty Shop

Nature of Activity

The following can be observed:

1. Town's first burial grounds.
 2. Names of desperadoes on grave markers, as Billy Clanton and the McLaury brothers.
 3. Surroundings in about the same state as when Tombstone was young.
-

Limiting Conditions:

No limiting conditions, but groups should be well supervised.

Time Required: 15 to 20 minutes

Best Days and Time: Open every day

Comments: No appointment is needed. The management welcomes groups at any time.

Helps impress Cochise County history on the students' minds.

Resource is best visited on same day as some other Tombstone resources are visited.

Place: Cochise Stronghold State Park

Address: Dragoon Mountains, 30 miles east of Benson
About 60 miles from Bisbee by State Highway 666;
located between Dragoon and Pierce

Nature of Activity

Activities and learnings:

1. Hiking and rock exploration.
 2. Hunt for medicine cave.
 3. Gain knowledge of hideaway of Cochise, famed Apache chief.
 4. See why Cochise and his Apache group were secure.
 5. Imagine where grave of County's most noted resident might be.
-

Limiting Conditions:

Open all year but best time to visit is in May.

Group must stay together.

Could be rattlesnakes.

Small groups best.

Time Required: Two or three hours

Best Days and Time: Good picnic place for weekend.

Comments: No charge except for overnight camping.
Excellent culminating activity after study of Cochise
and Cochise County.
Self-guided nature trail is of great value.

Place: Coronado National Memorial Park

Address: Star Route, Hereford, Arizona Phone: 366-5515

Person to Contact: (1) Jerry Pratt Title: Ranger
(2) Fred Davidson Title: Ranger

Nature of Activity

Activities and learnings:

1. One-half mile hike to 6,875 foot elevation.
2. Self-guided nature trail showing flora of region.
3. Slides oriented to park shown in Visitor Center.
4. History of area portrayed on panels in Center.
5. Learn that park commemorates first southwestern exploration by Europeans.

Limitating Conditions

Groups of about thirty preferred.
Closed December 1 to March 1 for groups.
Stay on trails and don't roll rocks.

Time Required:

About 2 to 2-1/2 hours

Best Days and Time:

9:30 a.m. Saturdays or arrange for time.

Comments:

A good place to identify birds and plants.
Park Ranger will guide tour, show slides, and speak to group.

Place: Doz Cabezas (Names after two volcanic peaks)

Address: Star Route, Willcox, Arizona
On highway to Wonderland of Rocks

Person to Contact: Cash Freeman, store operator

Nature of Activity

The following historical learnings may be derived:

1. Oldest schoolhouse in Cochise County seen.
 2. Note original site of cross by Father Kino.
 3. Locate original Indian Pit Houses about 2,000 years of age.
 4. See part of old Butterfield Stage Coach depot still standing.
 5. Learn about artifacts in Nell Merwin Museum.
 6. Deduct that Doz Cabezas formerly Ewell Station on a bloody pioneer trail
-

Limiting Conditions:

No limit as to group size
Small groups only in store to see Indian jewelry, Indian artifacts, and blankets.

Time Required:

About one hour

Best Days and Time:

Any day is all right

Comments:

Appointment is not needed, but preferable to be sure museum is open. An excellent history resource.

Place: Dragoon Spring

Address: Drive to Dragoon from interstate route 10 in Texas Canyon.
Dragoon is about two miles from the Amerind Foundation.

Person to Contact: Clifton Comstock Phone: 586-2592

Nature of Activity

Historical facts impressed:

1. Death of Pioncenay and Piahel, two Apaches at Butterfield Station.
 2. The scene of many massacres by Cochise.
 3. Tragic story of young men who gave lives to bring transportation to Cochise County.
-

Limiting Conditions:

No limit as to group size.
Obey safety precautions.
Spring and fall best.

Time Required:

About one hour

Best Days and Time:

Any day except Saturday

Comments:

A good time to visit this resource is the day of the Amerind Foundation trip. It is a valuable resource for impressing Cochise County history on the students' minds.

Place: Flying Horseshoe Ranch

Address: Dragoon, Arizona Phone: 586-2592
15 miles southeast of Benson

Person to Contact: (1) Clifton Comstock Title: Owner
(2) Mildred Comstock Title: Owner

Nature of Activity The following learnings may be derived:

1. History and value of Charolais cattle.
2. How cattle are branded.
3. How cattle are marked.
4. How cattle are roped and separated from herd.
5. Ruins of Old Butterfield Stage Coach depot can be located four miles south of Comstock home.

Limiting Conditions Group size not limited.
Safety precautions set up must be observed.

Time Required: Approximately two hours.

Best Days and Time: April and November by appointment

Comments: There is a simulated cemetery at old depot with names of two killed in battle. Very worthwhile for upper grades students.

Place: Fort Huzchuca Historical Museum

Address: Huachuca City, Arizona

Phone: 458-3898

Person to Contact: Orville A. Cochran

Title: Director

Nature of Activity:

The following can be seen:

1. Indian artifacts
 2. Antiques
 3. Historical displays
 4. Combat surveillance drones and army heliograph
 5. Meteorological equipment
 6. Vietnam display
-

Limiting Conditions:

Group limit is 25.
Hands should be kept from touching displays

Time Required:

At least one hour

Best Days and Time:

8:00 a.m. to 4:00 p.m. week days

Comments: Museum established in 1960 to depict story of the post, established to protect settlers of southwestern Arizona from raiding Apaches. No admission charge.

Place: Gabe's Doll Shop and Museum

Address: P. O. Box 511, Tombstone, Arizona Phone: 457-3419

Person to Contact: Gabe McNeely Title: Owner

Nature of Activity The following can be seen:

1. Dolls of olden times
 2. Toys of olden times
 3. Mineatures
 4. Old time greeting cards
 5. Old time furniture
-

Limiting Conditions: Small groups of 10 to 15
Admission free to school groups that
arrange for an appointment

Time Required: 20 to 30 minutes

Best Days and Time: Any day, any time

Comments: A most worthwhile experience for any age.
Resource fits well into history as old time things and ways of
doing are portrayed.

Place: Ghost Towns of Cochise County*

Location: Located and described according to accessibility

A. Quiburi:

Oldest ghost town, 3 miles north of Fairbanks on San Pedro River; site excavated by Amerind Foundation in 1953.

Take dirt road one mile west of bridge across San Pedro at Fairbanks and drive north three miles; hike east until ruins are seen on bluff above San Pedro River.

B. Contention City:

Ruins of Contention City are a little further north on same bank of San Pedro as Quiburi; townsite is badly eroded.

C. Grand Central Mill:

Located two miles north of Fairbanks on same side of San Pedro River; remains of a thirty-stamp mill; a huge stone terrace above river.

D. Hereford:

Located just north of Palominas; in 1880 was center of Colonel Greene's Cattle Company; named for Territorial Lawyer, Frank Hereford.

E. Thursday Crossing:

Located just south of where state route 90 crosses San Pedro River; here Apaches tortured whites and escaped to Mexico.

F. Lewis Spring:

Located just north of Thursday Crossing and is just north of the bridge and overpass on state route 90; marker in evidence showing where battle between Mormons and a herd of wild bulls took place; Mormon Battalion was under direction of Captain Cooke.

*Location aided by (22:1-107).

Ghost Towns (continued)

G. Charleston:

Located near paved Charleston Road at the San Pedro River and is nine miles from either Tombstone or Sierra Vista; look for a barbed wire fence; drive through gate to grove of cottonwoods; hike along railroad east of river for one-half mile; town will be seen on west side of river about a quarter mile north from the cottonwood grove and opposite ruins of old stamp mills; quite a few adobe walls still standing; about one mile from town site is the cemetery with marble markers engraved with quaint old-fashioned verse.

On east bank are rounded hills which are ancient volcanic cones; specimens of volcanic rock can be found.

Just north of townsite are petroglyphs chiseled on rocks and walls on east bank of San Pedro River.

On top of middle volcanic hill is an ancient fort; here arrow heads may still be found; ashes of last Apache signal fire slightly dust covered still there; visit when no danger from rain or flash floods.

H. Brunckow Mine:

Located on state route 90 on road to Tombstone; a mile or so from Charleston on south side of the road; ore samples available; deserted adobe buildings seen.

I. Boston Mill:

Located a few miles north of Charleston on east bank of San Pedro; hike along road of Boquillas Land and Cattle Company; leave unpaved road east of Charleston at second gate from river hiking about one mile where artifacts and arrowheads may still be found; stones laid out in shape of buildings and corrals may be seen, too; some porcupine and javelina here; mill site is another mile north; watch for uncovered wells.

J. Galeyville:

Travel U. S. Highway 80 to Douglas and on to Rodeo, New Mexico; then, on to Paradise which is in walking distance from Galeyville; old buildings have all been moved to Paradise which is on east slope of the Chiricahua Mountains; town established by copper prospectors.

Ghost Towns (continued)

K. Portal:

Located at the head of Cave Creek Canyon; here is Crystal Cavern; Cave Creek Canyon is about 60 miles northeast of Douglas; should be visited when trip made to Paradise and Galeyville.

L. Hilltop:

Located 14 miles south of state highway 86; is five miles north of Paradise; park cars at forks of road in canyon and hike up left fork to upper level; buildings constructed of tin, iron, wood, and adobe all in state of collapse.

Nature of Activity

Reasons for study of towns:

1. To visualize the county
2. To see history in action
3. To lend interest to information

Limiting Conditions:

Groups of fifteen or less
 Watch for uncovered wells
 Keep eyes open for snakes!

Time Required:

Your decision

Best Days or Time:

April or May

Place: Gleeson Museum and Ghost Town

Address: Elfrida, Arizona

Phone: None

Person to Contact: Willard Mayfield

Title: Owner

Nature of Activity

The following can be seen:

1. Turquoise mines in area
 2. Miscellaneous adobe remains
 3. Relics of pioneer days
 4. Military relics
 5. Relics from Fort Bowie
 6. Indian artifacts
 7. Old bottles containing original contents
 8. Rocks, minerals, purple glass items
-

Limiting Conditions:

None

Time Required:

About 45 minutes

Best Days and Time:

All days

Comments: No admission charge but write for an appointment.
Gleeson originally called "Turquoise."
Best for middle and upper elementary grades.

Place: Grizzle Peach Orchard

Address: Elfrida, Arizona

Phone: 642-3523

Person to Contact: Grizzle Lewis

Title: Owner

Nature of Activity:

Learnings to be gained:

1. Appearance of the trees
 2. Care of peach trees
 3. How peaches grow
 4. How peaches are picked
 5. How peaches are marketed
-

Limiting Conditions:

Appointment must be made in advance.
Small groups, 15 to 20
Late summer preferred season for visitation

Time Required:

About 30 minutes

Best Days and Time:

Any day when fruit being picked

Comments: A very good resource to show children how peaches grow as few peaches are raised in Arizona. Appointment in advance will enable Mr. Lewis to talk to children. Good resource for all grades.

Place: O'Gourek Cattle Ranch at Nickville

Address: Box 3261, Lowell, Arizona Phone: 432-4114
Ranch located about 20 miles west of Bisbee

Person to Contact: Vincent C. O'Gourek Title: Owner

Nature of Activity The following observations can be made:

1. Difference in Charolais, Herefords, Durhams, Black Angus, and mixed Breeds.
 2. The roping and separating of cattle.
-

Limiting Conditions: Group size not limited.
Observe safety rules
Stay with group
Spring or fall best season for use of this resource

Time Required: About 30 minutes

Best Days and Time: When Mr. O'Gourek is available

Comments: Group leader must arrange with Mr. O'Gourek for appointment.
Cattle will be rounded up and may be viewed from fence.
Mr. O'Gourek will talk to group regarding cattle.
Best for upper grades.

Place: O K Corral

Address: Allen Street, Tombstone, Arizona

Phone: 457-2227

Person to Contact: Mrs. R. E. Winkleman

Title: Manager

Nature of Activity

The following can be seen:

1. Hearse over 100 years old
 2. Carriages and buggies
 3. Interesting objects of the 1800's
 4. Life-like figures of the Earps, Clantons, and Doc Holliday
 5. Old stage depot
-

Limiting Conditions:

Must secure an appointment from Mrs. Winkleman to have free passage for school groups.

Observe general rules of good conduct.

Time Required:

About 25 minutes.

Best Days and Time:

Daily 8:30 to 5:30

Comments: Not advisable for lower and intermediate elementary grades.

Best for upper elementary and high school groups who are studying Arizona history.

Place: Old Cochise County Courthouse Museum

Address: 219 Toughnut Street, Tombstone Phone: 457-3531

Person to Contact: William R. Boulton Title: Supervisor

Nature of Activity The following may be seen:

1. Mining displays
 2. Processes of mining
 3. Macia Memorial Exhibit
 4. Old time furnished home
 5. 1880 Fire House Exhibit
 6. Old Post Office Exhibit
 7. Cattlemen's exhibit
 8. Innumerable artifacts
-

Limiting Conditions: No limit, but groups under 30 are best
School groups free
Obey general safety rules

Time Required: One to one and one-half hours

Best Days and Time: 8:30 a.m. to 5:30 p.m. daily

Comments: Very worthwhile for grades 3 to 8
A brochure is given to each visitor
Picnic facilities: City Park, one block

Place: Old Fort Bowie

Address: 8 miles south of Bowie on dirt road Phone: Tucson 825-3560

Person to Contact: Robert J. Gamer Title: Historian

Nature of Activity

The following can be seen:

1. First Butterfield stage station remains 300 feet below Fort Bowie ruins.
2. 1,000 acres historic trails.
3. Massacre sites.
4. Bascom and Parke camps.
5. Tevis Rocks.
6. Fort Bowie adobe ruins.

Limiting Conditions:

Spring or fall is the best time for visiting resource.

Steep walk for one-half mile, so small groups best.

Time Required:

About an hour and one-half

Best Days and Time:

Arrange in advance for appointment

Comments:

A good resource for establishing Arizona history. Fort established in 1682 for protection from Apaches especially for Butterfield Overland Stage Station.

Place: Paul Lime Plant

Address: Drawer T, Douglas, Arizona

Phone: 364-2429

Person to Contact: Howard Ames, Jr.

Title: Manager

Nature of Activity

The following can be seen:

1. The lime plant
 2. Lime
 3. Fluxing stone, etc.
-

Limiting Conditions:

A rather dangerous place.

Groups should be taken simply to view the plant from a distance.

Small groups best.

Advised to secure speaker.

Time Required:

About 10 minutes

Best Days and Time:

When Paul Lime Plant operating

Comments: Explosives are dangerous so advisable to arrange for a speaker to speak to groups. Best for junior high school groups.

Place: Rose Tree Inn Museum

Address: Tombstone, Arizona

Phone: 457-3326

Person to Contact: B. De Vere

Title: Operator

Nature of Activity

The following can be seen:

1. Diorama of Earps.
2. Old coins, clothing, carbines, and mining equipment.
3. Exhibits of purple glass, saddles, traps, bottles, implements of olden times.

The following can be heard:

1. Story of Lady Banksia's Rosebush.
 2. Story of the Inn.
-

Limiting Conditions:

Not over 30 in group.
Observe "Hands Off" motto.
Arrange for appointment.
No charge for school groups.

Time Required:

About 45 minutes

Best Days and Time:

Open every day, 9:30 a.m. to 5:00 p.m.

Comments: Very informational.

Original furniture of Macia family shown.
History of Inn and its relation to town given.

Place: Schiefflin Hall

Address: 4th and Freemont, Tombstone, Arizona Phone: 457-2227

Person to Contact: Mrs. R. E. Winkleman Title: Manager

Nature of Activity

Observation of:

1. Largest and most historical adobe structure in West.
 2. The place where opera, plays, and bettery type shows were seen.
 3. Portrait of Ed Schiefflin who struck first silver.
 4. Old pictures of area.
 5. Old-fashioned greeting cards.
-

Limiting Conditions:

None

Time Required:

About 10 minutes

Best Days and Time:

Daily 9:30 a.m. to 5:00 p.m.

Comments: No appointment needed, but it is wise to make an appointment with Mrs. Winkleman to see the Historama which is free to school groups and their leaders.

Place: Tombstone, Arizona: A Registered Historic Landmark

Address: 24 miles north of Bisbee on Highway 80

Nature of Activity

The following can be observed:

1. Buildings much the same in appearance as in 1881.
 2. A number of places can be visited to see how people used to live.
 3. The oldest Protestant church in Arizona.
 4. Colorful Dragoon mountains.
 5. Oldest standing Territorial Courthouse in Arizona.
 6. Numerous other things.
-

Limiting Conditions:

Average size groups.

No appointment necessary but is advisable for points of interest that group may wish to see.

Any season.

Obey rules of good conduct.

Time Required:

The major portion of the day

Best Days and Time:

Any day

Comments: Tombstone is an example of raucous Americans preserved as it was and is still exciting as well as interesting. Is most valuable when groups are studying Arizona and Cochise County history.

Place: Tombstone Epitaph

Address: Tombstone, Arizona

Phone: 457-2211

Person to Contact: (Office--9 South 5th)

Title: Manager

Nature of Activity

See the following:

1. Where Arizona's oldest, continuously published newspaper is printed.
2. Massive cottonwood tree in front of office.
3. Copies of first papers published.

Do the following:

1. Sign the Register of Visitors and see your name in print in the next issue.
-

Limiting Conditions:

Small groups of about 15
Stay outside pressroom doors
No appointment needed

Time Required:

About 15 minutes

Best Days and Time:

Open daily except Sunday

Comments: Students learn that paper received its name from its founder, John P. Clum, who said that every Tombstone had its Epitaph.

Enjoyable for all grades.

Place: Tombstone Historama

Address: 4th and Freemont Streets

Phone: 457-2227

Person to Contact: Mrs. R. E. Winkleman

Title: Manager

Nature of Activity

Things seen or heard:

1. Flames burning town.
 2. Water flooding mines.
 3. Fortune-hunters leaving town.
 4. War cry of Apache.
 5. Rumble of stagecoaches.
 6. Creak of wagons and the crack of whips.
-

Limiting Conditions:

None other than to make appointment for group.

Time Required:

45 minute show

Best Days and Time:

Daily 9:30, 11:00, 1:30, 3:00, 4:30

Comments: World's most unusual diorama depicting story of town
"too tough to die."
Animated life-like figures moving on revolving stage.
Is of value for any grade level.
Free to school groups.

Place: Underground Mine Tours

Address: Box 155, Tombstone, Arizona

Phone: 457-3423

Persons to Contact: George or Sally King

Title: Managers

Nature of Activity

The following may be seen:

1. The Million Dollar Stope.
 2. Original timber in use.
 3. How ores were mined.
 4. Tunnel four blocks long under the town of Tombstone.
 5. Some dangers of mining.
 6. Silver bearing ore.
-

Limiting Conditions:

No limit to group size.
Large groups need flashlights.
Stay together to listen to guide.

Time Required:

One hour

Best Days and Time:

10:00 a.m., 2:00 and 3:00 p.m., daily

Comments: Used to be free to school groups, but for the time being, manager asks 2/3 price or 50¢ for children and \$1.00 for adults. Recommended for junior high and high school.

Place: Valley Growers Gin, Incorporated

Address: Elfrida, Arizona

Phone: Elfrida 642-3471

Person to Contact: A. E. Cox

Title: Manager

Nature of Activity

The following can be seen:

1. Cotton seed.
 2. Unginned cotton.
 3. Ginned cotton.
 4. The gin process.
 5. Machinery in operation.
-

Limiting Conditions:

Write or call for an appointment from
October 10 to December 10. Small groups.
Use care around machinery.
Rather dusty.

Time Required:

About 30 minutes

Best Days and Time:

When gin is in operation

Comments: A most worthwhile resource when or after studying about
cotton raising.
Guide will tell about the ginning process and answer
questions.

Place: Wells Fargo Museum

Address: 511 Allen Street, Tombstone, Arizona Phone: 457-3398

Person to Contact: Floyd Laughrum Title: Manager

Nature of Activity

The following can be seen:

1. Largest collection of its kind in Southwest.
 2. 16th century and old English guns.
 3. Large collection of arrowheads and artifacts.
 4. Antique five-room house furnished as in 1881.
 5. Original Wells-Fargo Stage Coach.
 6. Over 50,000 items.
-

Limiting Conditions:

No group limit as to size.
Observe "Hands Off" policy

Time Required:

At least an hour

Best Days and Time:

9:00 to 5:00 daily except holidays

Comments: For large groups, provide plenty of supervision.
Recommended for all grades.
A 25¢ admittance fee is required.

Place: Wyatt Earp Museum

Address: 5th and Toughnut, Tombstone, Arizona Phone: 457-2222

Persons to Contact: (1) Harry Stewart Title: Manager
(2) Mrs. Harry Stewart Title: Co-manager

Nature of Activity

Students may view:

1. Authentic Earp collection
 2. Famous Gilchriese items
 3. Letters, photos, etc.
 4. Historic maps
 5. Invitation to a hanging
 6. Earp in action
 7. Earp's personal guns
-

Limiting Conditions:

No specification as to size of group.
Groups must have an advance appointment.

Time Required:

About 30 minutes

Best Days and Time:

Open every day, 9:00 a.m. to 5:00 p.m.

Comments: Not advised for primary or intermediate groups.
Truth portrayed which brought an end to lawlessness.

APPENDIX F

INFORMATIONAL LISTING OF COMMUNITY RESOURCES

USEFUL FOR FIELD TRIPS TO

ENRICH SOCIAL STUDIES

Please note:

Personal information has been redacted due to privacy concerns.

Place: American Red Cross--Bisbee District Chapter

Address: C-2 Plaza, Bisbee, Arizona Phone: 432-4522

Person to Contact: Mrs. Abbie Bigelow Title: Chairman

Nature of Activity

Learnings to be gained:

1. Location of American Red Cross, District Chapter.
 2. Story of the American Red Cross as related by the Chairman.
 3. Duties of the American Red Cross.
 4. How the American Red Cross can help us.
 5. What we should do to help the American Red Cross.
-

Limiting Conditions:

Groups of twenty to thirty best.

No special dangers but children must be quiet when going to public places and offices.

Time Required:

About one-half hour

Best Days and Time:

School days by appointment

Comments:

Mrs. Bigelow will visit schools, too.
She will show films.

Place: The Arizona Bank

Address: One Main, Bisbee, Arizona

Phone: 432-2234

Person to Contact: Gay D. Pilcher

Title: Manager

Nature of Activity

The following can be seen:

1. People at work
2. Vault containing valuables
3. Deposits being made and checks being cashed.
4. Mimeographed copies of assets and liabilities.
5. Room where customers have locked boxes.

Limiting Conditions:

Group size not over 35.

Suggested for children above fourth grade.

Time Required:

About twenty-five minutes

Best Days and Time:

By appointment

Comments: An excellent resource for children to learn more about.

Place: The Arizona Bank
Address: 10 Bisbee Road, Warren, Arizona Phone: 432-5351
Person to Contact: Mr. Walter Mades Title: Manager

Nature of Activity The following can be seen:

1. People at work.
2. Vault where valuables are kept.
3. Deposits being made.
4. Large rooms where customers have locked boxes for valuables.
5. Mimeographed copies of assets and liabilities.
6. People operating necessary machines.

Limiting Conditions Group size--not over 25.
Suggested for children above fourth grade.

Time Required: About 20 minutes

Best Days and Time: By Appointment

Comments: Besides the operation of banking, the children may inspect the Old Bisbee Mineral Collection which is cased in the bank.

Place: Arizona Public Service Company
Address: Naco Road, Bisbee, Arizona Phone: 432-2281
Person to Contact: Bob Holland Title: Manager

Nature of Activity Things to do:

1. Visit Saginaw District sub-station (150,000 volt capacity).
2. Recall that power originates from Davis Dam and power line feeds from there.
3. See how electricity sent out to various parts of community.

Limiting Conditions: Justified for small groups.

Safety precautions must be followed, as situation could be dangerous.

Best for children over fifth grade.

Time Required: About 20 minutes

Best Days and Time: Any school day

Comments: Mr. Holland will show cut-down views of transformers and switch breaker when speaking to group. Arrange for appointment.

Place: Arizona Water Company
Address: 44 Main, Bisbee, Arizona Phone: 432-5321
Plant on Naco Highway Phone: 432-4752
Person to Contact: James H. Reardon Title: Manager

Nature of Activity During this field trip the group should visit:

1. The water plant at Naco
(4 wells but just 3 used)
2. Two primary booster stations at
Tin Town.
3. Primary booster station in Tombstone
Canyon.

Limiting Conditions: Group size not limited.
Any time but when it happens to snow.

Time Required: About 45 minutes

Best Days and Time: No special time or day

Comments: Mr. Reardon will speak to groups after they have made trip telling how water pumped directly from ground, amount pumped daily, how 31 samples sent monthly for testing, etc.

Place: Bisbee Daily Review

Address: 12 Main Street, Bisbee, Arizona

Phone: 432-2231

Person to Contact: Mr. John Newett

Title: Manager

Nature of Activity

The following may be observed:

1. Printing and cutting of newspapers
 2. Commercial printing
 3. Linotype machine
 4. Teletype
 5. Press
 6. Type setting
 7. Different kinds of paper
-

Limiting Conditions:

Group limit: 25
Stairs and machinery safe when directions obeyed

Time Required:

30 minutes

Best Days and Time:

Weekdays 2:00 to 4:00 p.m.

Comments: Much worthwhile information can be gained from this resource.

Place: Bisbee Fire Department

Address: Bisbee, Arizona

Phone: 432-2261

Person to Contact: Clyde Burchinal

Title: Fire Chief

Nature of Activity:

Many learnings may be derived:

1. Visualization of firemen and fire trucks.
2. What happens when an alarm is turned in to station.
3. How important the fire departments are to the town.

Limiting Conditions:

Small groups best
Obey safety precautions

Time Required:

About 30 minutes

Best Days and Time:

By appointment any school day

Comments: There are five fire stations;

- No. 1 - Main Street, Bisbee, Arizona
- No. 2 - Tombstone Canyon
- No. 3 - Lowell Traffic Circle
- No. 4 - Warren, Arizona
- No. 5 - Highway 92 and Naco Road

Place: Bisbee Lumber Company, Incorporated

Address: Lowell Plaza, Lowell, Arizona

Phone: 432-2203

Person to Contact: Jim Gibbons

Title: Yard Sup't.

Nature of Activity

See different types and kinds of building materials:

1. Plywoods
 2. Panel of cedar, pine, oak, maple, birch, etc.
 3. Other lumber of fir, native pine, and mahogany
 4. Sheet rock, concrete blocks, cement, roofing
 5. Cedar shingles
-

Limiting Conditions:

20 to 30 in group
Follow safety instructions

Time Required:

About 45 minutes

Best Days and Time:

Arrange for appointment

Comments: Advisable for pupils above third grade.

Resource is very informative as well as interesting.

Place: Bisbee Police Department

Address: Naco Road, Bisbee, Arizona

Phone: 432-2261

Person to Contact: Arthur J. Kent

Title: Chief

Nature of Activity

Value of Resource:

1. To aid children in knowing where the Police Department is located.
2. To gain an understanding of some duties of the department.
3. To ask questions of Police Chief.
4. To listen to talk by Police Chief.

Limiting Conditions:

Group size 25 to 30.
Suggested for any grade level.

Time Required:

About 20 minutes

Best Days and Time:

By appointment--any day or time

Comments: Policeman would be allowed to serve as a resource person upon request.

Place: Chamber of Commerce

Address: Drawer I, Bisbee, Arizona

Phone: 432-2141

Person to Contact: H. C. Beall

Title: Manager

Nature of Activity

Students may view the following:

1. Over 200 early photographs and pictures of Bisbee dating back as far as 1879.
 2. Replica of underground copper mine made by Mr. and Mrs. Ralph Hargis of Warren.
 3. Many items pertinent to the early days.
-

Limiting Conditions:

Groups of 25 to 30 best.
Observe "Hands Off" policy.

Time Required:

About 30 minutes

Best Days and Time:

Any school day; make appointment

Comments: Mr. Embry (phone 432-3802) has rock collection in Chamber of Commerce which he would be happy to explain if group leader will contact him previous to trip.

Place: City Dog Pound

Address: Roverville, Lowell, Arizona

Phone: 432-2261

Person to Contact: John Lemon

Title: Manager

Nature of Activity

Reasons for Field Trip:

1. To see various kinds of dogs.
 2. To see different kinds of cats.
 3. To learn what care is given the animals.
 4. To learn that those who are desirous of having a pet may secure one at the dog pound.
-

Limiting Conditions:

Group size: not over 30
Keep hands out of cages

Time Required:

About 20 minutes

Best Days and Time:

By appointment

Comments:

A good resource to show how pets should have proper care.

Place: Cochise County Courthouse

Address: North Main Street, Bisbee, Arizona Phone: 432-2267

Person to Contact: T. J. Wilson Title: Sheriff

Nature of Activity Resource is recommended as a tour of the courthouse:

1. Jail visitation.
 2. View relief map of Cochise County on Courthouse wall.
 3. Library.
 4. Probation officer.
 5. Recorder's Office.
 6. Other County Offices.
-

Limiting Conditions: Groups of 20 to 30 best.
Walk carefully on stairways.

Time Required: One to one and a half hours

Best Days and Time: Any weekday except Monday

Comments: Make an appointment with Sheriff Wilson for conducted tour of Cochise County Courthouse.
Officer of each department will explain functions of his department.
Speakers from the various offices may be secured to speak to your school group.

Place: Cochise County Jail

Address: Courthouse, Bisbee, Arizona

Phone: 432-2267

Person to Contact: T. J. Wilson

Title: Sheriff

Nature of Activity

See some of the following:

1. Radio broadcasting to police departments of Cochise County.
 2. The speed of apprehension.
 3. Fingerprint room.
 4. Guns, handcuffs, etc.
 5. Persons behind bars.
-

Limiting Conditions:

Groups of 20 to 30 best.
Don't stare at prisoners.

Time Required:

About 30 minutes or less

Best Days and Time:

By appointment

Comments: Sheriff Wilson suggests that this is a must for all intermediate, junior high, and senior high school students to visit. He feels it is a valuable resource for preventing juvenile delinquency.

Place: Connie's Flowers

Address: 42 Main, Bisbee, Arizona

Phone: 432-2603

Person to Contact: Connie Munset

Title: Owner

Nature of Activity To see different flowers and plants such as:

1. Ferns, palms, and vines.
2. Chrysanthemums, azaleas, geraniums, etc.
3. Roses and other cut-flowers.

Limiting Conditions:

Groups of 25 to 30.
Take care in stepping about flowers.
Observe "Hands Off" policy.
Plants will differ at different seasons.

Time Required:

About 30 minutes

Best Days and Time:

Call for appointment

Comments: Children can become familiar with some kinds of plants and flowers by visiting flower shops from time to time.

Place: Copper Queen Library

Address: 6 Main, Bisbee, Arizona

Phone: 432-4232

Person to Contact: Mary Howe (Mrs. Ed R.)

Title: Librarian

Nature of Activity:

Students may:

1. Look at books displayed.
 2. Learn about library facilities.
 3. Learn use of card catalogue.
 4. Ask questions.
 5. Select books.
 6. Learn that most learnings are derived from books.
-

Limiting Conditions:

20 to 30 can be accommodated at one time.
No loud talking permitted.

Time Required:

45 to 60 minutes

Best Days and Time:

Any school day, but check on time.

Comments: Mrs. Howe will give a lecture explaining the use of the catalogue, importance of books in life, and an antique book comparison. Most worthwhile when group engaged in research.

Place: Economy Building and Supply

Address: Don Luis, Bisbee, Arizona

Phone: 432-5378

Person to Contact: John Economy

Title: Manager

Nature of Activity

The following building materials, agricultural items will be seen:

1. Concrete block.
 2. Sheet rock.
 3. Plywoods of various kinds.
 4. Roofing, cement, etc.
 5. Cedar shingles and composition shingles.
 6. Paneling of cedar, pine, oak, and maple.
 7. Various kinds of lumber.
-

Limiting Conditions:

Groups of 10 to 15 best.
Observe "Hands Off" policy.
Any season.

Time Required:

About 45 minutes

Best Days and Time:

Tuesdays, Wednesdays, Thursdays

Comments: Arrange for an appointment a few days in advance.
Various feeds, grains, and seeds may be observed.

Place: El Minuto Tortilla Factory

Address: 3 Howell Avenue, Bisbee, Arizona

Phone: 432-9944

Person to Contact: Ernestine Silva

Title: Proprietor

Nature of Activity

The following may be seen:

1. Kind of flour and corn used for making different types of tortillas.
2. Tortillas being made.
3. Tortillas being baked.

Limiting Conditions:

Groups of 20 to 30 best.
Keep away from machinery.

Time Required:

About 30 minutes

Best Days and Time:

Any school day.

Comments: This is a good resource when the group has been studying Mexico.

Places, Addresses, Phone Numbers, and Persons to Contact to tour local grocery stores:

- (1) El Rancho Village Market
P. O. Box 4078, San Jose Branch
Bisbee, Arizona
- Charles Ruggaber, Manager Phone: 432-5783
- (2) Phelps-Dodge Mercantile Company
Copper Queen Plaza
Bisbee, Arizona
- Bill Wilson, Manager Phone: 432-2224
- (3) Phelps-Dodge Mercantile Company
405 Arizona Street
Warren, Arizona
- Drex Kuskie, Manager Phone: 432-2842
- (4) Safeway Stores
209 Bisbee Road
Warren, Arizona
- Arthur Watters, Manager Phone: 432-2775
-

Nature of Activity:

The following learnings can be derived:

1. How stores are arranged.
2. How foods are displayed.
3. Kinds of foods shipped from other parts of our country.
4. Kinds of foods shipped to us from other countries.
5. Other things are sold in grocery stores besides foods.

Local Grocery Stores (continued)

6. How vegetables are kept fresh.

7. How frozen foods are kept.

Limiting Conditions: Limit group size to 15 or 20.
 Must observe "Hands Off" policy.
 Stay together.

Time Required to visit
any of the markets: About 40 minutes

Best Days and Time: The first part of the week

Comments: All seem to agree that the first part of the week is best as there are not as many customers. However, Safeway's manager says Wednesday or Thursday morning is all right.

Arrange for appointment with manager of the store you wish your group to visit.

Place: First National Bank of Arizona

Address: 7 Main, Bisbee, Arizona

Phone: 432-2221

Person to Contact: Virgil Swanner

Title: Manager

Nature of Activity

The following can be seen:

1. People operating machines.
 2. Large vault--walk-in type.
 3. Deposits being made.
 4. Cashiers taking and changing money.
 5. Mimeographed copies of assets and liabilities.
 6. Room where customers have locked boxes for valuable papers.
-

Limiting Conditions

Group size not over 35.
Suggested for children above the fourth grade.

Time Required:

20 to 25 minutes

Best Days and Time:

Call for appointment

Comments: Of the three banks listed, this one has the larger operation and bank vault.

Place: Health Department of Cochise County

Address: School Hill, Bisbee, Arizona

Phone: 432-5451

Person to Contact: Miss Evelyn Kropp

Title: Supervisor

Nature of Activity

Children will become acquainted with this facility:

1. By viewing slides illustrating functions of the office.
 2. By meeting the nurses.
 3. By talking with the nurses and asking questions.
-

Limiting Conditions:

Small groups of 10 to 15.
Observe general rules of good conduct.

Time Required:

About 30 minutes

Best Days and Time:

School days, no special time

Comments: Two weeks' notice is needed.

Staff members will also visit school and talk to group:

Mr. Lonnie Bright - Sanitation

Miss Evelyn Kropp - Cancer

Mrs. Marcia Nygard - Tuberculosis and other topics

Place: James Nursery and Supply

Address: Route 1, Box 70, Douglas, Arizona Phone: 364-8551

Person to Contact: L. H. James Title: Owner

Nature of Activity: Many learnings can be derived:

1. Kinds of plants seen which are suitable to be grown in the area .
 2. Kinds of trees and shrubs which grow well in the area .
 3. Plants and shrubs which are just being tried in the area .
 4. Names of growing things .
 5. Why fertilizer is used .
 6. Why differend kinds of sprays and insect powders used .
-

Limiting Conditions: Groups of 20 to 30.
Be careful not to touch plants .

Time Required: About 45 minutes

Best Days and Time: Nursery is open every day

Comments: Literature will be available to group if advance notice of youngsters' coming given.

Lava rock from area spread in driveway.

Place: La Poblana Tortilla Factory

Address: Don Luis, Bisbee, Arizona

Phone: 432-4672

Person to Contact: Mrs. Leon Garcia

Title: Owner

Nature of Activity

Learnings to be gained:

1. How masa is made.
 2. How hominy is made.
 3. Kinds of corn which are best to use.
 4. How tortillas are made and baked.
 5. Ingredients used in different kinds of tortillas.
 6. Machinery used.
-

Limiting Conditions:

Not over 20 in a group.
Stay away from machinery.

Time Required:

About 30 minutes

Best Days and Time:

Mondays or Tuesdays in winter

Comments: Resource is good to use in connection with study of Arizona and/or Mexico. Mrs. Garcia is an interesting speaker and demonstrates as she speaks.

Place: Lavender Pit Copper Mine

Address: State Highway 80, Bisbee

Phone: Not needed

Person to Contact: None

Nature of Activity

See the following:

1. Trucks hauling 65-ton loads of rock and ore up spiraling road from Lavendar Pit.
2. One of America's most important copper mines.

Hear the following:

1. Push-button narration of Phelps-Dodge Copper Pit Mine story.
-

Limiting Conditions:

No limit as to group size.
Available anytime, but weather could be a little chilly in winter.

Time Required:

About 25 minutes

Best Days and Time:

None specified

Comments: Lavender Pit embraces over 200 acres and is being enlarged. The pit has been deepened to a depth of 1,000 feet.

This resource is worthwhile when studying the different kinds of mining or when studying Arizona.

Place: Location of Naturalization Proceedings

Address: Contact County Courthouse or watch Bisbee Review as
different organizations sponsor this event.

Nature of Activity All are welcome to attend the proceedings
which are held on May 1 and first Thursday
in December. Usually about thirty people
from eight different countries are naturalized
at each event.

Limiting Conditions: No limit to group size.
Observe rules of proper conduct .

Time Required: One to two hours

Best Days and Time: Check time and place by watching newspaper.

Comments: Recommended for groups studying civics, Arizona, or United
States history.

Superior Court Judge Anthony T. Deddens always presides.
He may be contact for information concerning time and place
of event by calling 432-5393.

Place: Mountain States' Telephone Company

Address: 11 Bisbee Road, Warren, Arizona Phone: 432-2241

Person to Contact: Mr. Terrance James Title: Manager

Nature of Activity

The following will be shown:

1. Operators at work receiving and sending messages to all parts of the country.
 2. Modern equipment.
 3. Uses of modern equipment.
-

Limiting Conditions:

No limit to group size.
Observe general rules of courtesy.

Time Required:

30 to 45 minutes

Best Days and Time:

By appointment on weekdays

Comments: Recommended for units on progress of science and study of communication.

Teachers may borrow educational films by signing up for them in advance. A telephone kit is available for use in the schoolroom.

Place: Phelps-Dodge Concentrator (Above Pit on hill)
Address: 609 West Vista, Warren, Arizona Phone: 432-3218
Person to Contact: W. G. Hogue Title: Manager

Nature of Activity Pupils will observe:

1. Ore samples.
2. Testing of samples.
3. Weighing of samples.
4. Information given by speaker

Limiting Conditions: Groups limited to 15 persons.
Children must be over twelve years of age.
Dangerous, so directions must be obeyed.

Time Required: About 20 minutes

Best Days and Time: Write for appointment and verification

Comments: Since this is dangerous when rules not obeyed, it might be better to send to the U. S. Bureau of Mines at Tucson, Arizona, for two educational films produced by the Bureau of Mines in cooperation with Phelps-Dodge. Films show all mining operations.

Place: Radio Station KSUN

Address: Drawer C, Lowell, Arizona

Phone: 432-2277

Person to Contact: Joe Von Kanel

Title: Operator

Nature of Activity

Demonstrations of the following:

1. Messages being sent by phone.
 2. Newspaper reports being received by network.
 3. Recordings of messages that are transcribed and how they are sent out.
 4. Questions answered, also.
-

Limiting Conditions:

Groups limited to 15.
Grades four to eight.

Time Required:

About 25 minutes

Best Days and Time:

Any time, weekdays

Comments: It would be well to take this trip on the day of the trip to the Review office.

Place: Residence of [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Person to Contact: [REDACTED]

Nature of Activity

The following may be observed:

1. A collection of items from Korea.
 2. Kodak pictures of Hawaii.
 3. Large collection of antique dishes.
 4. A "coverlid" bedspread that is over 100 years old; also three dolls of same old age.
-

Limiting Conditions:

Since the place is small, the best use of resource would be a planned interview by a committee.

Time Required:

About 30 minutes

Best Days and Time:

By appointment

Comments: [REDACTED] has Barred-rock chickens.

[REDACTED] is an interesting conversationalist and enjoys talking with children. She explains things well.

Place: Residence of [REDACTED] [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Person to Contact: Mrs. [REDACTED]

Nature of Activity

Learnings to be gained:

1. The difference in size, shape, and height of trees.
 2. The difference in leaves of trees.
 3. How to tell the following:
 - a. Red bud
 - b. Common maple
 - c. Kentucky maple
 - d. Red locust
 - e. Silver maple
 - f. European birch
 - g. Arizona cypress
 - h. Colorado blue spruce
 - i. Cherry, peach, apricot
-

Limiting Conditions:

Groups of 10 to 15 best
March or April best time.

Time Required:

About 45 minutes

Best Days and Time:

Any day by appointment

Comments: Many other persons have a fair selection of trees, but this is recommended as one of the best.

Place: Ruth's Flower Shop

Address: Arizona Public Service Building

Phone: 432-3541

Person to Contact: Ruth J. Hendricks

Title: Owner

Nature of Activity:

To show the beauty and variation of flowers and plants:

1. Ferns, palms, and vines.
 2. Roses and other cut-flowers.
 3. Chrysanthemums, azaleas, geraniums, etc.
 4. Leaves and mosses.
-

Limiting Conditions:

Groups of 15 to 20 best.
Variety of plants seen is more or less seasonal.

Remember to look at plants, but do not touch them.

Time Required:

About 30 minutes

Best Days and Time:

Call for appointment

Comments: Recommended as an aid in teaching various kinds of plants and flowers.

Mrs. Hendricks is an interesting speaker. The children will enjoy listening as she tells them about flowers and their care.

Place: Southwest Trildust Zoo

Address: Double Adobe Road, Bisbee, Arizona Phone: 432-5841

Person to Contact: Howard Hamm Title: Manager

Nature of Activity

Many things can be viewed:

1. Local animals of the area.
 2. Items of historical interest.
 3. A few plants, such as the fig-leaf plant and rubber plant.
 4. Many reptiles.
 5. Small aquarium.
 6. Paintings.
-

Limiting Conditions:

Groups size should be 35 to 40.
Larger groups may be divided.
Any season all right.

Time Required:

About 45 minutes

Best Days and Time:

Any day from 10:00 a.m. until dark.

Comments: Appointment not needed but is preferable.

Future plan is that zoo will become "Cochise County Zoo,"
an educational project of Cochise College.

Place: U. S. Post Office of Bisbee, Arizona

Address: South Main, Bisbee, Arizona 85603 Phone: 432-2052

Person to Contact: Eric E. Nelson Title: Postmaster

Nature of Activity

Observations of following:

1. Automatic cancelling machine.
 2. Direction of mail dispatch.
 3. Air mail dispatch.
 4. Weighing mail and determining parcel post rates.
 5. Sorting of mail and placing it in boxes.
 6. Handling of money orders.
 7. Zip Code divisions.
-

Limiting Conditions:

Groups of 10 to 40 welcome.
Obey "Hands Off" policy.

Time Required:

About 30 minutes

Best Days and Time:

Any day, 9:30 a.m. to 2:00 p.m.

Comments: Children of all grades should become familiar with this resource.

Mr. Nelson explains the processes of handling mail and the zip codes.

Place: U. S. Post Office, Warren, Arizona

Address: 319 Arizona, Warren, Arizona

Phone: 432-3431

Person to Contact: Ruth L. Street

Title: Postmistress

Nature of Activity

The following may be observed:

1. Handling of registered mail.
 2. Handling of money orders.
 3. Sorting of mail and placing it in boxes.
 4. Weighing of mail and determining parcel post rates.
-

Limiting Conditions:

Group size limited to 10.
Obey "Hands Off" policy.

Time Required:

About 20 minutes

Comments: This is a small post office so cannot accommodate large groups. Appointment is needed.

Place: Warren Redi-Mix

Address: Box 297, Don Luis, Bisbee, Arizona Phone: 432-4121

Person to Contact: Dave Strickland Title: Owner

Nature of Activity The following learnings may be gained:

1. The nature of concrete.
 2. More knowledge about cement.
 3. How concrete is made.
 4. Use of sand and gravel.
 5. How Redi-Mix is transported.
-

Limiting Conditions: Groups of 25 to 30.
Seasons when concrete is being made.

Time Required: About 20 minutes

Best Days and Time: Whenever plant is operating

Comments: Call for an appointment as plant isn't always in operation.
Worthwhile when studying the various materials used in building.

Place: Western Union Telegraph Company

Address: 5 Howell Avenue, Bisbee, Arizona Phone: 432-4751

Person to Contact: Mr. Robert Nicol Title: Manager

Nature of Activity See or do the following:

1. See the sending and receiving of telegrams.
 2. See machines transcribing dots and dashes into messages.
 3. Observe sounds of different letters.
 4. Ask questions about process.
-

Limiting Conditions: Small groups of 10 to 15.
Observe general rules of good conduct.

Time Required: Approximately 30 minutes or more.

Best Days and Time: Mondays through Friday, school hours.

Comments: Worthwhile when studying ways and means of communication.

Mr. Nicol will talk to groups and answer questions.

APPENDIX G

PERSONS WITH BROAD TRAVEL EXPERIENCE AVAILABLE FOR RESOURCE PURPOSES IN SOCIAL STUDIES CLASSES

Please note:

Personal information has been redacted due to privacy concerns.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Has traveled in most of the United States.
2. Has traveled in Canada and the Orient.
3. Has stamp collections of countries all over the world.
4. Will give talks regarding countries by appointment.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Traveled in all states but four.
2. Will show slides and pictures.
3. Has many slides of Arizona.

Name: [REDACTED]

Address: [REDACTED]

Phone: None at present

Background and Comments:

1. Has traveled into Culican Sinola, Mexico, and Mazatlan, Mexico.
2. Has many, many kodak pictures and postcards.
3. Has some items made in Mexico.
4. Good speaker for small groups only

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Traveled widely in Japan, Okinawa, Hong King, and Singapore.
2. Will tell about country.
3. Has few photos to show.
4. Also has collection of about fifty specimens of rocks and native minerals.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Has traveled in Alaska and New England states.
2. Has a German shepherd from Alaska which she shows to children.
3. Has photos and pictures of above areas.
4. Is an able speaker.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Traveled in Korea, Japan, and Greenland.
2. Is an able speaker.
3. [REDACTED] is Director of the Bisbee Recreation Center.

Name:

[REDACTED]

Address:

[REDACTED]

Phone:

[REDACTED]

Background and Comments:

1. Traveled widely in Japan, Scotland, Ireland, Russia, and Hawaiian Islands.
2. Plans to go to Alaska summer of 1968 and take slides.
3. Has 80 slides on Russia.
4. Will speak to groups by appointment November to May as he travels the rest of the year.

Name:

[REDACTED]

Address:

[REDACTED]

Phone:

[REDACTED]

Background and Comments:

1. Traveled throughout Mexico and most of the United States.
2. Works as a Customs Agent in values investigation and aids in apprehension of narcotic smugglers on Mexican border.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Has a great deal of knowledge about Germany, France, Russia, and Hungary.
2. Also has case of rocks and minerals.
3. Has small coin collection.
4. Will talk to small school groups.
5. Call to arrange for an appointment.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Toured western and southern states, Cuba, Peru, Brazil, Chile, and Bolivia.
2. Has money from a number of the countries.
3. Will talk to school groups.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Wide travel experience which includes France, Switzerland, Spain, Austria, Czechoslovakia, and Rome, Italy.
2. Has slides of all countries visited.
3. Has foreign money and curios.
4. Call to make an appointment for your group.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Lived in Hawaii on Oahu for three years.
2. Has pictures, clothing, and curios.
3. Will make appointments to give talks on weekends or evenings.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Traveled in Philippines , and Saipan.
2. Has pictures and picture booklets.
3. Will speak by advance appointment

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Was an army nurse in Africa , Burma , and India during World War II.
2. Has some pictures to show.
3. She will be happy to speak to school groups.
4. Call her to make an appointment.

Name: [REDACTED]

Address: [REDACTED]
[REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Travels include the entire U. S. , Europe , Japan , Korea , and Hawaii .
2. Has pictures and curios of areas .
3. Will speak to groups regarding any of the countries listed .
4. Is an interesting speaker .

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Spent fifteen months in Hawaii .
2. Has pictures of Hawaii .
3. Has booklets depicting Hawaii .
4. Will serve as a resource person during study of Hawaii .

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Traveled in Mexico, New Mexico, and Arizona.
2. Has pictures of many areas of Mexico.
3. Has collection of Indian artifacts.
4. Will share experiences with schools.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Spent one year in Greenland.
2. Will talk to school groups and show slides of travels.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Has traveled through Mexico and Mexico City.
 2. Has pictures and snapshots of Mexico.
 3. Has good collection of Indian artifacts (over 200 pieces in collection).
 4. Will speak to groups of children or to PTA groups.
 5. Arrange for appointment well in advance.
-

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Travel experience includes Mexico, Canada, Iceland, Germany, Bavaria, Austria, Netherlands, etc. (Slides)
2. Welcomes interviews.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Specialist in Arizona geography and places of interest in the state.
2. Has slides of Arizona, mertate and manos, bowls, Indian artifacts.
3. Will talk to small school groups by appointment.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Several dolls of foreign countries.
2. Travel experience includes France, Germany, Austria, Switzerland, and Italy.
3. Will speak to children's groups on request.
4. Has postcards and picture albums of countries.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Has traveled through Far East, Japan, and Korea.
2. Collected a few pictures.
3. A good person to interview as she is a teacher.
4. Will speak to groups evenings by appointment.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Extensive travel to Spain, Portugal, France, Italy, Switzerland, England, New Guinea, and Philippines.
2. An excellent historian.
3. Will speak to school groups by appointment.
4. Suggested for grades 3 to 8.
5. May be interviewed by committee or individuals.

APPENDIX H

PERSONS HAVING HISTORICAL KNOWLEDGE AVAILABLE FOR RESOURCE PURPOSES IN SOCIAL STUDIES CLASSES

Please note:

Personal information has been redacted due to privacy concerns.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Actually a pioneer of Cochise County.
2. May be interviewed by individuals or committee.
3. Will serve as a resource person during study of Arizona history.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Granddaughter of gold-seeking Bisbee pioneer.
2. Has personal collection of photographs and museum pieces dating back to 1881.
3. Will speak to school groups.
4. A most able speaker, and author.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Has maps of Arizona dating back to 1687.
2. Has collection of old pictures of places in County.
3. Collection of Indian relics and artifacts.
4. May be interviewed.
5. Will speak regarding Arizona history to small groups.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. A specialist in juvenile problems.
2. Well-informed on Bisbee history.
3. Excellent resource person for grades 4 to 8.
4. Will speak to P.T.A. groups.

APPENDIX I.

COCHISE COUNTY RESOURCES THAT MAY BE USED FOR
FIELD TRIPS IN SCIENCE CLASSES

Place: Carr Canyon

Location: 26 miles from Bisbee on Highway 92 S.W.;
then 6-1/2 miles west of highway up canyon.

Nature of Activity

Reasons for trip:

1. To study varied soils
 2. To study rock formations
 3. To get red clay for clay activities
 4. To study flora and fauna
 5. To study rocks and minerals
-

Limiting Conditions:

Groups of ten or less

Watch for rocks that roll

Best to go in May or June due to road
conditions

Time Required:

One hour or more

Comments: The red clay is very usable and seems to fire quite well.
The few who go may report to the rest of the group.

Place: Cave Creek Recreation Area

Location: 11 miles northwest of Rodeo, New Mexico;
60 miles north of Douglas

Nature of Activity

Reasons for trip:

1. To see mammoth red rock domes containing small caves.
 2. To see weird and unusual rock formations such as slipped, tilted, and pushed up rocks.
 3. To study flora and fauna.
 4. To study soils
-

Limiting Conditions:

Road may be bad during rainy season.

Groups of eight or ten best.

Most things may be seen in May or June and may be more enjoyable then due to warmer weather conditions.

Time Required:

As much as one cares to spend.

Best Days and Time:

A weekend campout is desirable.

Comments:

Numerous camping and picnic spots.

Many scientific learnings may be derived if class prepared for them previous to experience.

Place: Chiricahua National Monument
Address: Star Route, Willcox, Arizona Phone: None
Person to Contact: Superintendent, Chiricahua National Monument,
Willcox, Arizona 85643

Nature of Activity The following can be seen:

1. 17 miles of fantastic rock formations.
2. Museum at Visitor Center.
3. Balanced rocks of rhyolite.
4. Varied flora and fauna.
5. Various minerals.

Limiting Conditions: Group limit should be 30
Keep on hiking trails
Do not roll or throw rocks
Walk, don't run

Time Required: Two to three hours

Best Days and Time: Spring and Fall--9:30 to 5:00
Open all year, however

Comments: Guided tours 9:30 to 2:30 Saturdays and Sundays.
Recommended when studying rock formations.

Place: Continental Divide

Location: 1 mile north of Bisbee on old highway above
Mule Pass Tunnel

Nature of Activity

Reasons for trip:

1. To note results of the divide
 2. To note land forms
 3. To study rock formations, trees, shrubs, etc.
 4. To note rock disintegration
 5. To note visible tree roots 20 to 30 feet in length between stones along bank
 6. To note history related on Continental Divide marker stone
-

Limiting Conditions:

Groups not limited to size
Do not roll rocks
Available any season

Time Required:

About 45 minutes

Best Days and Time:

No specifications as to time

Comments: This is a useful resource for social studies.

Place: Excavation Area , University of Arizona

Address: Hereford, Arizona

Phone: 366-5554

Person to Contact: Ed Lehner

Title: Owner

Nature of Activity

Reasons for trip:

1. To study soils: loam, red clay, green clay, black humic layer, bone horizon, coarse sand, fine sand, young brown soil
2. To study micro-fossils
3. To study location of elephant bones
4. To listen to Ed Lehner's talk regarding area

Limiting Conditions

Groups of 20 to 30 or so
No special hazards or seasonal factors involved

Time Required:

About one hour

Best Days and Time:

Call for appointment

Comments: Mr. Lehner has hereford cattle which may be of interest. Resource is located 14 miles west of Bisbee. Take Highway 92 west, then go 3 miles north on Palominas Road.

Place: Nicksville Cafe and Store

Address: Nicksville, Arizona

Phone: 458-9942

Person to Contact: Ruth Diack

Title: Owner

Nature of Activity

The following may be seen:

1. Indian artifacts
 2. Skeleton of Indian buried in sitting position
 3. Rocks and minerals
 4. Sand paintings done in native sands or ground rocks in native colors
 5. Clay articles made from native clay
-

Limiting Conditions:

Groups of 15 to 20 as store is small
Observe "Hands Off" policy

Time Required:

About one-half hour

Best Days and Time:

Open every day, but appointment needed

Comments:

A very good resource for learning what can be done with sand in sand paintings; an excellent source of scientific information.

Place: Red Clay Deposits

Location: 5 miles north of Highway 80 west of Douglas on
The King's Highway. Turn into old dump area.

Nature of Activity

Reasons for trip:

1. To study soils of area.
 2. To note erosion.
 3. To gather red clay.
-

Limiting Conditions:

No limit to group size.
May use this resource at any time.

Time Required:

30 minutes

Comments: This is a good red clay which fires well. When fired it
turns pink.

Several soil types may be observed where erosion has
occurred.

Place: Rucker Canyon Recreation Area

Location: About 57 miles from Bisbee; turn east off Route 666 and follow Rucker Canyon Road

Nature of Activity:

Reasons for trip:

1. To have a room picnic.
 2. To see Rucker Dam.
 3. To see large squirrels, such as the Red Fox squirrel.
 4. To study flora.
 5. To study rocks and minerals of area.
-

Limiting Conditions:

Camp Rucker best for large groups as there is room for baseball, etc.

During rainy season road to dam may be impassable.

Time Required:

Several hours

Best Days and Time:

In spring near close of school

Comments: Elevation 6,500 feet.

Several well-maintained campgrounds with modern facilities.

Plenty of trails for hiking and nature study.

Place: Rustlers' Park

Location: In Chiricahua Mountains at 8,400 foot elevation; about 100 miles from Bisbee via U. S. 666 and State Highway 181.

Nature of Activity

Reasons for resource trip:

1. To impress history of Arizona.
 2. To study rocks, soils, and minerals of area.
 3. To study flora and fauna of area.
-

Limiting Conditions:

Groups of 30 to 40.

September or May best due to weather and road conditions.

Time Required:

As much as can be devoted.

Best Days and Time:

Weekend campout or picnic day.

Comments: In spring, resource area is a flower bed of wild iris; gorgeous displays of other wild flowers such as lupines, primroses, paint brushes, geraniums, gilia, penstemons, blue bells, fairy dusters, etc.

Be sure to have plenty of gas as you may wish to visit Chiricahua National Monument, too.

Place: Southwestern Research Station

Address: Portal, Arizona 85628

Phone: 602-2396

Person to Contact: Vincent D. Roth

Title: Director

Nature of Activity

This is a permanent year-round field laboratory open to students investigating science problems involving the use of the floral, faunal, and geological features of the area.

No exhibits designed for the public.

Plant and animal life may be studied in five different zones.

Limiting Conditions:

High school and college students only.

If residence desired, make application for fees and admittance.

Comments: Call for appointment.

Listed due to the fact that teachers may be interested.

Place: Special Rock Formations Near Bisbee

Location: (1) 12 miles north of Bisbee east of U. S. 80.
(2) 6-1/2 miles north of Bisbee on west of U. S. 80.
(3) Just east of Lowell and the traffic circle.

Nature of Activity

Formations to be seen:

1. Tilted rocks
 2. Evidences of wrinkling and folding
 3. Leveled rocks
-

Limiting Conditions:

Small groups

Stay in group as group must remain fairly close to highway.

Any time of year satisfactory

Time Required:

15 minutes

Comments: Resources very worthwhile when studying about the changing surface of our earth.

Place: Texas Canyon

Location: On edge of town of Benson, Arizona, just off State Highway 86

Nature of Activity

Reasons for trip:

1. To see towering rocks carved by nature into awe-inspiring contours.
 2. To note soils of area.
 3. To study flora and fauna of area.
-

Limiting Conditions:

No limit to group size.

Watch for snakes during warm weather.

Time Required:

About an hour

Best Days and Time:

After group's visit to Amerind Foundation

Comments: Resource is most picturesque. Group can eat lunch at nearby picnic area.

Place: Tree House

Location: In midst of St. David Valley on U. S. 80, 8 miles north
of Tombstone, Arizona

Nature of Activity

The following may be seen:

1. Cottonwood (poplar) with a circumference of 21 feet which was planted by Mormons in 1870's and now uses 500 gallons of water daily.
 2. Excellent collection of rocks and minerals.
 3. Miscellaneous artifacts.
-

Limiting Conditions:

Groups of 10 to 40

Time Required:

About 20 minutes

Best Days and Time:

Weekends 9:00 a.m. to 6:00 p.m.

Comments: No appointment is needed; however, if so desired, Mrs. Eleanor Libby of St. David may be contacted. Resource is open daily in the summer time.

Place: Turkey Creek Canyon

Location: Near Wonderland of Rocks

Nature of Activity

The following can be seen:

1. Five kinds of hummingbirds.
 2. Many kinds of birds.
 3. Numerous butterflies.
 4. Wild turkes or tracks, feathers, and an occasional gobbler.
 5. Deer and squirrels.
 6. Many kinds of flora.
-

Limiting Conditions:

Roads may be bad during rainy season, so spring is best.

Small groups, as more can be seen and heard.

Time Required:

About two hours

Best Days and Time:

A weekend campout preferable

Comments: Canyon received its name from the flocks of wild turkeys that fatten on the wild oats. The rare ivory-billed woodpecker and coppertailed trogon found here.

APPENDIX J

COMMUNITY RESOURCES TO ENRICH SCIENCE CLASSES

Please note:

Personal information has been redacted due to privacy concerns.

Name: Ted R. Allen, Minerals and Gems

Address: 56 Black Knob, Warren, Arizona Phone: 432-5050

Person to Contact: Ted R. Allen Title: Owner

Nature of Activity

Students will see the following:

1. Rocks, minerals, and gems
 2. Small boxed collection in process of being labeled
 3. Gem cutting and the making of gem sets
 4. Stone polishing
-

Limiting Conditions:

Not over 30 in a group
No special dangers

Time Required:

30 minutes

Best Days and Time:

Call for an appointment

Comments:

Educational resource for those interested in learning the names of rocks and minerals.

Place: Bisbee Minerals and Gem Shop

Address: P. O. Box 466, Bisbee, Arizona Phone: 432-3073

Person to Contact: Charles E. Youngblood Title: Owner

Nature of Activity

Students may observe:

1. Various minerals and gems
 2. Some precious stones
 3. Antique displays
 4. Carved woods
 5. Fossil displays
-

Limiting Conditions:

Not over 20 in a group
Observe "Hands Off" rule

Time Required:

30 minutes

Best Days and Time:

Monday through Friday; call for appointment

Comments:

Mr. Youngblood is willing to bring specimens and discuss rocks and minerals in the classroom by appointment.

Name: Boyce Terrell Mills (Rocks and Minerals)
Address: 41 Hazard Street, Warren, Arizona Phone: 432-2913
Person to Contact: Boyce Terrell Mills Title: Owner

Nature of Activity Students may observe:

1. Minerals and gems of area
2. Minerals and gems of other areas
3. Over 300 specimens

Limiting Conditions: Small groups preferred
Observe "Hands Off" policy

Time Required: About 45 minutes

Best Days and Time: Make an appointment

Comments: Most of this collection is cased and labeled.
Mr. Mills welcomes group and is very happy to explain, discuss, and answer questions regarding the collection.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Person to Contact: [REDACTED]

Title: Owner

Nature of Activity

The following may be seen:

1. Very fine bottle and lid collection.
 2. About 75 pieces of doll furniture made of pine, maple, and mesquite.
 3. Albums of foreign stamps and United Nations stamps.
 4. Over \$50 worth of historical coins.
 5. Purple glass collections.
 6. Specimens of glass turning amber.
-

Limiting Conditions:

Not over 20 in a group
Observe "Hands Off" policy

Time Required:

About 30 minutes

Best Days and Time:

Evenings or weekends

Comments:

[REDACTED] works so is not available to groups of students on week days.

Wood carvings portray intricate workmanship.

Name: Phelps-Dodge Office Building

Address: Arizona and Hoatson Streets, Warren Phone: 432-2521

Person to Contact: Mrs. Margaret Bigham Title: Secretary

Nature of Activity

Students may observe:

1. Collection of largest gems and minerals in area.
 2. Ore samples (some lovely large ones).
 3. Some recent samples.
-

Limiting Conditions:

Groups of about 20 preferred
No seasonal factors

Time Required:

About 30 minutes

Best Days and Time:

9:00 to 4:00, Monday through Friday

Comments:

An excellent collection of mineral samples taken from Phelps-Dodge mines: samples of malachite, azurite, galena, covelite, chalcocite, native copper, barnite, chalcopyrite, aragonite, cuprite, hetaerolite, etc.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Person to Contact: [REDACTED]

Title: Owner

Nature of Activity

Students will observe:

1. Excellent rock and mineral collection.
 2. Fluorescent minerals.
 3. Names of various rocks and minerals.
-

Time Required:

About 45 minutes

Best Days and Time:

Evenings--any day

Comments: This is another very good collection.

[REDACTED] works, so advance appointment must be made to see rock collection on his day off or in the evening.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Person to Contact: (1) [REDACTED]
(2) [REDACTED]

Title: Owner
Title: Co-owner

Nature of Activity

Students will observe:

1. Large miscellaneous rock collection which is well-labeled.
2. Fluorescent minerals.
3. Rock cutting and polishing of rocks.

Limiting Conditions:

Groups of about 20 or less.
Obey rules of good conduct.
Suggested for grades 3 to 8.

Time Required:

About one hour

Best Days and Time:

Call for appointment

Comments: This is another fine collection of minerals and rocks.
[REDACTED] are good speakers and can hold interest
of group.

APPENDIX K

RESOURCE PERSONS WITH SCIENTIFIC KNOWLEDGE,
HOBBIES, OR COLLECTIONS

Please note:
Personal information has been redacted due to privacy concerns.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Soil Conservation
2. Suggested for grades 4 to 8
3. May be interviewed by individual or committee
4. Will speak to groups by appointment.
5. Will serve as a resource person during study of soil conservation.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Has three cases of rocks and minerals.
2. Has some old coins.
3. Will speak to interested groups.
4. Would show specimens.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Manager, Phelps-Dodge Mines.
2. Arrange for speaker on mining operations.
3. [REDACTED] would speak regarding nuclear blast or underground operations.
4. In case he is not available, he will arrange for another speaker as a substitute.

Name: [REDACTED]

Address: [REDACTED]

Phone: Not listed at present

Background and Comments:

1. Raises cacti as hobby.
2. Has cacti from most every country in the world in greenhouse.
3. Cross-pollinizes cacti for new species.
4. May be interviewed by students or will show small groups of high school or college age the specimens.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED]

Background and Comments:

1. Shows sun's effects in coloring jars and other containers purple.
2. Good learning experience when studying effects of sun and heat.
3. She is willing to talk to school groups.

Name: [REDACTED]

Address: [REDACTED]

Phone: [REDACTED] [REDACTED]

Background and Experience:

1. Is lineman for Public Service.
2. Is informed regarding wiring, transformers, high voltage lines and their dangers, etc.
3. Will speak to groups evenings or weekends by appointment.
4. Worthwhile resource person when group studying electricity.

Name: T. J. Wilson, Sheriff

Address: Courthouse, Bisbee, Arizona

Phone: 432-2267

Background and Comments:

1. Informed regarding the growth, use, and effects of marijuana.
 2. Will show marijuana or Indian hemp samples.
 3. Will show marijuana cigarettes and reefers.
-