

MSU Extension Publication Archive

Archive copy of publication, do not use for current recommendations. Up-to-date information about many topics can be obtained from your local Extension office.

Marketing Your Community Park and Recreation Resources: Program Ideas for Slide Tapes

Michigan State University Extension Service

Maureen H. McDonough and Cheryl L. Dyer, Department of Park and Recreation Resources

Issued October 1983

8 pages

The PDF file was provided courtesy of the Michigan State University Library

Scroll down to view the publication.

MARKETING YOUR COMMUNITY PARK AND RECREATION RESOURCES:

Program Ideas for Slide-Tapes

By Maureen H. McDonough and Cheryl L. Dyer
Department of Park and Recreation Resources

Have you ever wondered why some people don't take advantage of outdoor recreation opportunities in their area? Perhaps they think there isn't enough adventure in nearby recreation. Or, perhaps these people just don't know what's available because recreation opportunities are not sufficiently publicized.

Anyone involved with budgets knows how important it is to develop a supportive clientele; when budgets are lean this base of support has to be relied on for millage increases, fees, donations, or volunteer assistance. The best way to get people involved is to keep them informed. This doesn't have to be an expensive endeavor to have a lot of impact. However, it does take an investment of creative time and energy.

This bulletin is designed to help you market your community park and recreation resources by developing your own slide-tape program. Although there are different ways to put together a program, the ideas in this bulletin are based on our practical experience of

planning and producing the slide-tape, "Community Parks and You."

Although many of us tend to feel like we're all thumbs when working with audio-visuals, they can be successfully used by anyone. Our purpose in developing the slide-tape and this bulletin is to show how to communicate your own message and to give you a behind-the-scenes look at how to put that message together to communicate it as effectively as possible. To enhance people's awareness, we have also developed an interpretive take-home map to reinforce the information in our slide-tape. Since a map can be used as a reference whenever necessary, it can be a useful tool in getting across your own message.

The suggestions in this bulletin are meant only as a starting point in communicating a unified message. You'll probably have your own ideas on how to create a needed program. The sections that follow will outline how to set objectives, take inventory, compose a storyboard, shoot slides, make a tape, and design an interpretive map. We will also discuss pretesting the slide-tape once you have it organized.

Planning Your Slide-Tape

Define Your Objectives

When thinking about developing an interpretive slide-tape program and map, the first question you should ask is "What do I want my slide-tape to accomplish?" To help answer this question, you need to have a broad goal in mind and specific objectives that can be measured in behavioral terms. In other words, if you want to evaluate how well you have met your objectives you have to have something, such as behavior, to measure.

For example, one goal of our slide-tape program, "Community Parks and You," was to increase public awareness of park and recreation resources in the Lansing area. Originally, the goal was to include all parks in Ingham County, but we quickly realized that meeting such a goal was unrealistic. Rule #1, therefore, is to *set reasonable goals* for your program.

Your program may have one or more goals, but goals are broad and often stated in very idealistic terms. So let's get down to *objectives*—clearly defined, measurable statements.

In developing our slide-tape program, the objectives were:

1. The audience will learn where community natural resources are located.
2. The audience will learn about the diverse features of parks in the Lansing area.
3. The audience will know what recreational opportunities are available on a seasonal basis.

Each of these objectives is measured. For instance, have members of the audience fill out a pretest and a post-test to indicate what they've learned from viewing the program. However, unless you are being financed through a government agency or grant from a specific group, you may never have to prove that

your slide-tape program meets your objectives. In addition to providing guidelines for possible evaluation, objectives can guide you in the actual development of the program.

Although we could have met our objectives in a variety of ways, we chose the means discussed in Table A. Table B gives sample objectives for a different goal which some community groups might like to achieve.

Table A. Establishing and Meeting Objectives

Our Goal:	
To increase public awareness of parks and recreation resources in the Lansing area.	
Our Objectives:	So We:
1. The audience will learn where community natural resources are located.	Used a clearly defined map slide of all parks discussed. Used a map slide in introducing each particular park. Verbally referred to each park in terms of familiar landmarks or street locations (to relate to what the viewer knows). Used a logical geographic sequence when introducing a new park.
2. The audience will learn about the diverse features of parks in the Lansing area.	Chose thirteen parks to highlight. Emphasized at least one special feature of each park. Used slides which focused on major attractions viewers would be likely to remember. Designed a take-home map to reinforce information in the slide-tape.
3. The audience will learn what recreational opportunities are available on a seasonal basis.	Included many slides of people recreating (to provoke interest). Included slides of parks in all seasons. Discussed a wide variety of things people can <i>do</i> in parks (we didn't just talk about scenery). Used slides of people of various ages and cultural backgrounds.

Table B. Attaining Objectives

To change user behavior at area parks.	1. Visitors will park in appropriate places.	Show slides of parking area signs/symbols. Show slides of where parking areas are located at various parks. Discuss easy access to facilities from designated areas. Show problems improper parking causes.
	2. Visitors will demonstrate concern for park upkeep.	Show slides of deteriorating park conditions. Use slides of park sites which have been pleasantly kept up. Use a brief interview (15 seconds) with a park employee. Use slides of park visitors assisting with maintenance.
	3. Visitors will remain on designated nature trails in sensitive areas.	Show a slide asking visitors to stay on trails. Discuss the importance of preserving these areas. Use slides showing deterioration. Use slides showing reclaimed areas. Show people enjoying themselves <i>on</i> the trail. Use images revealing the beauty and excitement of nature that can be experienced from the trail itself. Use a slide of various generations enjoying an area (to indicate that the land is for future generations to enjoy as well). Use slide of well located interpretive sign.

Now that these examples of goals and objectives have been presented, you might want to try your hand at it using the following form. In writing your own objectives, it may be tempting to develop them around slides already on hand. But in doing so you may end up with a set of objectives that don't even meet the original goal. The kinds of slides needed will come naturally from your objectives, so start with them. Remember, objectives should be written in behavioral terms. That is, use words that will *specify some actual changes in measurable behavior*.

You may find that writing objectives takes time and patience . . . and even a little help from friends in order to get them just the way you want them. There's no better way to learn than by doing, so try it now!

My Goal Is:

The Objectives to Achieve This Goal Are:

Some of My Ideas to Accomplish These Objectives Are:

Take Inventory

Taking inventory of available resources before developing your slide-tape program is absolutely necessary.

Types of Resources:	An Inventory of Resources Can:
Natural	<ul style="list-style-type: none"> • Increase your knowledge of existing natural resources to be highlighted in the program.
Technical	<ul style="list-style-type: none"> • Identify photographers, writers, artists, and equipment.
Community	<ul style="list-style-type: none"> • Give you a better understanding of what people would like from a slide-tape program. • Help you avoid duplication in developing the program.

Taking inventory is actually a survey, but you don't have to be a researcher or an investigative reporter to conduct one. The information you want may be as close as the telephone, or you might find yourself spending an afternoon exploring a local pond. The inventory should be conducted with the *project objec-*

tives in mind, and the better you know the community to begin with, the easier it will be.

The inventory we conducted included a tour of parks in the area and meetings with 4-H youth and senior citizens. Several weeks were spent visiting many of the parks in Lansing. This allowed us to assess each park's recreational opportunities. When possible, we asked people in the park about less obvious information such as when and by whom the park is used and what management problems exist from a visitor's perspective. Walking the trail was the best way to find out what the attractions were for each park—a pair of binoculars and a sack lunch made this task of our inventory even more enjoyable.

The second part of our inventory, meetings with 4-H youth and senior citizens, was aimed at learning what interests people about parks. We arranged for the members of each group to fill out a questionnaire to help in planning our slide-tape program. The questionnaire was brief and written in simple language. Some of the questions asked were: (1) What kinds of information do you like to know about a park before you go? (for example, location, people there); (2) What kinds of features (woods, lake, river, etc.) do you find attractive?; and, (3) What kinds of things do you find bothersome when you visit parks? (If you choose to use a questionnaire as part of your inventory, you can request help through the Cooperative Extension Service).

The data from the questionnaires indicated what people might find attractive in a slide-tape program. For example, water resources were rated high so we made certain to emphasize this in our program. Although we specifically surveyed 4-H'ers and seniors, you might identify other groups (families, handicappers, etc.) to target. Remember, including other people's thinking in your planning helps *them* feel more positive about what you are doing and also gives you ideas. Secondary data sources may also be available such as park visitation records, or you can check with a library.

Although you are now ready to do an inventory, you may not be sure *what* to inventory. Table C can help you in fitting an inventory to your particular needs.

If you have other concerns not listed, there's probably someone near you who has just what you need—but it may take some digging.

An inventory may sound like too much work, but a little early planning will make the final task that much easier. Knowing what resources you have—or *don't* have—is insurance against losing precious time and energy when developing your slide-tape program.

Table C. Taking Inventory

If You Want to Know:	Then You Can:
1. What parks and recreation sites are available.	Contract local environmental groups. Contact the nearest Park and Recreation Department or the Department of Natural Resources. Check for the information you want in the phone book or at the library.
2. What resources are available within each site.	Spend time visiting the site. Talk with employees. Collect brochures and maps. Talk with individuals who have used the site.
3. What people might like to see and hear in a slide-tape program.	Identify from which types of people you would like feedback. Talk with them informally. Distribute a questionnaire. Arrange for them to participate in a special activity and give feedback. Try to include them as you develop the program.
4. Who can help with the slides and script?	Contact local photographers, camera shops, public service departments at radio and television stations, libraries, and extension agents.
5. How to record your slide-tape program.	Contact audio-sound shops, people involved with recording, public service departments of radio and television stations, libraries, and extension agents.

Develop Your Storyboard

Now that you have a goal, objectives and an inventory of your resources, possible topics need to be tied together in one cohesive theme that can be simply stated in a sentence. A theme is similar to a thread interwoven in cloth; it holds your work together. Without a carefully thought out theme, there is the risk of trying to take on too few or too many materials. You can easily fall into the trap of trying to have a slide-tape be all things to all people. "Recreation opportunities in the area offer year-round enjoyment" is the theme we used, which incorporates both park services and activities.

The theme is not an end in itself but a guiding principle in storyboard development. Planning the storyboard is a process used to develop a logical and interesting flow of information in the script. There are several ways to lay out a storyboard. One method is to use large sheets of newsprint blocked off into a sequence of squares. This approach is helpful in the beginning when you're trying to come up with a very rudimentary sketch of the script. Just as an introduction, body and conclusion are needed in a paper, they are also needed in your script. Just staring at it on the wall may stimulate some ideas.

In drawing up the storyboard using newsprint, you might devote one sheet to each part of the script. Each square should include visual (slides) and/or

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24

When drawing up a storyboard using newsprint, divide each piece into several squares.

audio (music) cues, and the words to be spoken. You may also want to indicate in each box how long an image is to be shown on the screen (*A good rule of thumb is no more than 10 seconds per slide; less time for less detailed slides.*) Of course, ideas at this point will be guesses. There are always additions and adjustments to be made when creating.

Since your slide show will include quite a few slides, using the newsprint method means you'll have a lot of boxes to fill. It can become cumbersome. An alternative for laying out a storyboard is to use index cards to sequence your ideas (4 x 6 inch cards should be adequate).

The advantages of using cards are that: 1) they are heavier than paper and can take a lot of wear and tear; 2) you can shuffle them and easily re-arrange them if you have second thoughts; 3) if you ruin a card, you can simply add a new one; and 4) they're easy to transport. Many people also find it relatively easy to use cards when they're actually taping the script. To get a total picture of your script, lay them out in sequence on the floor. (Or staple plastic strips to a piece of plywood and arrange the cards as you want.)

Each notecard or storyboard box should have space for at least the following information:

<p><i>Visual Image:</i> <i>(drawing preferable)</i></p> <p><i>Audio Cues:</i> <i>Script idea</i></p>	<p style="text-align: right;">1</p> <p style="text-align: right;"><i>Description of visual</i></p>
--	--

You may want to add other information as you go along, such as the intonation to be used by the narrator (breathy, deep, quick, etc.), when to pause or ideas on where and how to shoot the slide. Remember that the "first draft" of the storyboard is just that—so don't limit the creativity by prematurely squelching your ideas.

For example, the first draft of a storyboard card might be:



You'll probably find that changes will have to be made. The slide you wanted may not be available or may not be what you want by the time you're ready to shoot it. Or you thought you had taken a perfect shot but either the camera setting was wrong or the film didn't advance in the camera (it does happen!). You may also find that you can attain the desired mood with a different sound. For example, the final version of storyboard card #1 might look like this.



Doing a storyboard won't happen overnight. In fact, you'll probably be making changes right up to the time of the final taping. However, the storyboard can force you to think ahead and envision a final product and help to avoid being sidetracked by intriguing sounds and shots. Now to complete the final version of your storyboard, you'll need to know more about shooting slides and taping your program.

Shoot Your Slides

Another good rule is to remember that slides are cues, not crutches. The slides, as well as the script, should depict the uniqueness of the subject matter.

With that said, let's consider a few important interpretive techniques to aid your slide selection. For example, to *provoke* attention you can deliberately double-expose your first slide and then have the audience ponder a riddle. Remember, the average time that slides should be on the screen is ten seconds. That means you don't have a long time to get your point across, so you should also *relate* to what the audience already knows and little by little *reveal* your message. People do not like to be inundated with information when they are trying to enjoy a program. Shooting slides that involve human interest and/or animals, along with a little humor, matches a recreational frame of mind. If you can get the audience involved with your thinking, you're certainly in a much better position to gain their support.

Now let us consider how long the whole slide-tape program should be. First, you need to consider where your program will be shown. If, for example, you know you will be using a Carromate machine in an exhibition booth your slide-tape should be short. (No more than 6 to 7 minutes; at that, people will probably not stay through the whole program.) If, on the other hand, you want to present more information and, you will primarily be showing your program at group meetings, you can go as long as 15 minutes. However, shorter is better. Second, you need to know your audience, which doesn't mean that you won't bore some people and not others. But you should have a clue as to what frame of mind people will be in when viewing your program.

The simple arithmetic of these numbers is that 10 seconds per slide allows you 6 slides per minute. If your program is 10 minutes long and you're using a single projector, as we did, you can use 60 slides.

Now, you may be wondering where you're going to get all those slides if you're not a camera buff and you can't recruit one. One possibility is that when you took your initial inventory you may have overlooked slides available to you (see Table C).

Borrowing slides could pose a problem, however. Other than the possibility of losing them, you have to be very conscious of original slide quality because slides lose quality when copied. Underexposed and poorly-focused slides in particular do not copy well.

If you do take your own slides, use a 35mm camera. You will have more flexibility with a 35mm camera, and probably better slides than those taken with an instamatic-type camera. You can also make interesting title and credit slides by using kodalith film in a 35mm. Another less complicated method simply

involves using transfer letters or writing with a felt-tip pen on the matte finish of clear slides.

There are, of course, many options when shooting slides, but three important points are well worth noting: 1) be sure you have enough light; 2) get in close to your subjects; and 3) take several shots of each subject. You will also save yourself undue frustration by remembering to get help and practice if trying to use a 35mm camera for the first time.

One last hint about the slides. You can always decide not to use them. Updating a slide-tape program is easily done by changing slides but only if there is still cohesion between the slides and the tape.

Tape the Program

To have a cohesive package, you have to have quality slides that support the script, and a quality tape. Sandy McBeath and Earl Wolfe at Gillette Nature Center, in P. J. Hoffmaster State Park, consider sound to be of great importance. Both work at developing cohesion between the visual and auditory aspects of a slide-tape program. They strongly recommend using music as an aid in setting the tone of the tape. Different types of music can enhance different aspects of the narrative. Music can be used in an interpretive sense to stimulate interest.

In our slide-tape, the third movement of the *Grand Canyon Suite*, "On the Trail," was used as background to encourage curiosity and humor. The following chart will give you some ideas in matching music and sound to the moods in your own slide-tape program.

If You Want to Emphasize:	You Might Use:
Excitement	A rousing movement from a symphony or a movie sound track.
Romanticism/ serenity	A sentimental classic or woodwinds.
Humor	Children's songs, songs out of context (i.e. show a group of hikers and exaggerate the difficulty by playing "Climb Every Mountain.")
Curiosity	Music which employs onomatopoeia—the music sounds like a natural phenomena (i.e. violin plucking to emphasize a bird chirping).

The list could go on, since it is limited only by the many moods and images your slide-tape might create.

In addition to using music to enhance or emphasize, you might also incorporate other sounds. The sounds of people laughing or talking—or even jumping in a swimming pool—may underscore their enjoyment. The sounds of nature can also be a powerful addition to your tape. Possibilities include rustling of trees, roar-

ing of the tide, a gentle (or not so gentle) rainstorm, chirping birds and other animals noises. Some of these sounds are available on records that you can check out at your local library.

Regardless of what sounds you choose to use, make sure that you don't overload the listener with too many sounds that might detract from the script. As in nature, a little quiet doesn't mean that nothing is happening. Incidentally, your local librarian, or a friend who enjoys music, might be able to come up with just the right music if you tell them what you have in mind. (You also need to consider copyright laws if using recent pieces directly from a recording.)

Once the background sounds are ready, you'll want to begin the actual recording. McBeath and Wolf suggest hiring the services of a professional, such as a disc jockey, to make the voice tape, unless you have good voice inflections and tone. You might also be able to find someone who has experience in drama or communications (a drama teacher or someone in a community theater, for instance) who will help.

If you decide to record the voice tape yourself, you will need to locate a microphone and recorder of good quality. If you don't have a good quality tape recorder you won't get a quality sound. However, you don't need to rush out and buy the most expensive tape recorder on the market. Just use the best quality recorder you're able to locate. If you don't already have one, check with your local radio or television stations, extension agent, library or schools.

When we made our tape, we used a Wollensack recorder and microphone. The Wollensack can electronically cue the tape so that the slides will automatically change in the projector. Another brand of recorder may meet your needs, but you may later want to record the electronic cues with a Wollensack. You may also want to use a microphone holder, since it eliminates the sounds that result from holding the microphone yourself.

Before recording your tape, practice reading through the script until you're very comfortable with it. Use the voice inflections you want when practicing. Have someone listen to you, and make a practice tape to give you an idea of how you sound. Since your microphone will pick up noise around you, try to find a sound-proof room for recording or a place where there is minimal noise. (Make sure that a phone won't ring when you're halfway through the script!)

Avoid speaking directly into the microphone, or you may have explosive sounding consonants. It is best to keep it four to six inches and to one side of you so that you "talk across it" not directly into it. You should also know that every time the recorder is stopped a clicking sound will be left on the tape, so run through your script without any stops. (If you are using a reel to reel tape, mistakes can be cut out

and the tape you need spliced back together, but this can be complicated.)

When you're ready to record, keep the following in mind:

Use A Good Quality Tape. It's worth the extra cost.

Have An Extra Tape With You. If something goes wrong with the first one, you'll be prepared.

Put the Volume on Medium. You want your voice to register normally.

Test the Tone. Check and see if you need to raise or lower the treble control.

Relax. Take a few deep breaths before you begin—especially if you're nervous.

Speak Normally and at A Comfortable Pace. There is a tendency to speed the pace, which will make the recording sound bad.

Don't Stop. If you make a small error, correct it as best you can and keep going. Check later to see if the tape is useable.

Turn the Pages or Cards of Your Script Quietly. Remember the microphone will pick up the noise.

Be Patient with Yourself. Even if you need to make several "takes," you're learning as you go along.

There are usually two options for recording your tape. You can record the background music and voice simultaneously on one machine, or you can record the music and voice on two separate tapes and then use a mixing console to make the finished product. A mixing console is a machine that uses three tape recorders to "mix in" the music after taping the voice. When using the mixer, you can control the sound level of each tape allowing for more flexibility than if using just one recorder. Since mixing is a more technical process, you probably won't be able to do it without previous experience. Someone at a local radio station or communication department may be able to help you.

Table D. Recording Options

Method	Procedures
1. Record music and voice simultaneously on one recorder.	Have a second person control the music while you're reading the script.
2. Use a mixing console.	Record a voice tape and a music tape; then feed tapes through a mixer onto another tape.

Once you have your tape, it is time to electronically cue it. You may use one or more slide projectors for your program. Multiple slide projectors provide you with some special effects, but the more you use the more complicated the production. (Regardless of how many projectors you use, allow about two seconds between slides when recording.)

If you choose to use one projector, you can use a Wollensack tape recorder for electronic cuing. Press

the visual advance button as your tape is playing with the synchronization switch in the record position. (You have to move the switch, then push the record button to hold the record position.) There's no need to worry about making a mistake; just replay the tape with the switch in the same position to erase the cues. You can always recue a tape or change the slides, but the master tape has to be good.

You can increase the variety of your program by dividing the slides between two projectors and varying the pauses between slides. You will need to use a dissolve unit with a multiple projector program, which is an attachment that allows you to record the pauses between slides in the projectors. Again, you'll probably need assistance from someone who has had previous experience.

Designing an Interpretive Map

So that people would remember our program, we developed an interpretive map as a take-home reminder of our slide-tape presentation. When designing your map, keep the following points in mind:

1. The map is not as much for scale as it is for reinforcement—**make it fun.**
2. Each aspect of the community mentioned in your slide-tape can be highlighted; **only use information already presented.**
3. An interesting and provoking tidbit about each aspect might also be given if your map is large enough.
4. **Unify your message.** For example, a stick character (Natty Resource) that appeared in our slide-tape, reappears on our map to show potential park visitors the way to adventure.
5. Make sure your map is legible and easily understood. **Use a map key.** We used symbols for facilities such as exercise trails and tennis courts, and for natural resources such as rivers and nature trails.
6. **You don't have to spend a lot of money.** You might want to use colored paper and perhaps colored ink but the map should not be a strain on your budget.

Let your creativity flow in making your map. Most of us have, at one time or another, wished we had the directions to some secret buried treasure. This is your chance to share the often hidden beauty and excitement of natural resources with others.

Pretest

As mentioned, civic, social or youth organizations in your community may be helpful in the initial inventory for the slide-tape. They may provide you with suggestions about what they would like to see and hear in your program. Those same groups can also

help debug or correct the program once it's put together. When you pretest your program, go back to the original group you used earlier. Their on-going involvement allows them to maintain a real interest in the project. If you can't pretest with the original groups, find others that are willing to participate.

The purpose of pretesting is to find out what may be confusing or missing in your script and what the audience likes or doesn't like. When we pretested "Community Parks and You," (and the accompanying map) the evaluation forms distributed yielded valuable information. For instance, one viewer of the slide-tape recommended that we make smoother transitions between some slides. Several others suggested we include more winter and fall scenes. Another suggested we use more color on our map. There were positive comments too. Viewers said they enjoyed our use of humor and the variety of recreation opportunities portrayed.

Audience feedback can provide good ideas to help re-think your script. You may have to change some slides or redo the tape (we did), but the changes will make your program that much more effective in meeting program objectives. Sometimes it's hard to be open-minded enough to really listen to other people's suggestions. But if you don't listen to them, why should they listen to you?

Conclusion

Now that we've gone through many of the details of putting together a slide-tape and map, you are ready to begin in your own community. (You may borrow the slide-tape "Community Parks and You" from the Cooperative Extension Service, Department of Agricultural Extension Education Library.) You have a lot to do, but you can take it one step at a time.

1. Establish a goal for your program and set clearly defined, measurable objectives.

2. Take inventory of available natural, technical and community resources.
3. Develop your storyboard.
4. Write the first draft of your script.
5. Shoot and/or collect your slides.
6. Make a master tape which includes voice, music, or other sounds.
7. Electronically cue your tape so that the slides will change at the right times.
8. Develop your interpretive map.
9. Pretest the slide-tape and map with several groups.
10. Make any necessary revisions in the tape, slides or map.
11. Have fun showing your product.

After you've completed all of the above, don't forget the twelfth step; appreciate what you've done and take time to visit one of those natural resources that has become so familiar. Be good to yourself—you deserve it.

Bibliography

- Hedgecoe, John. *The Photographer's Handbook*. New York, New York: Knopf, 1977.
- How to produce a Slide Show*. Washington, D.C.: National 4-H Council, 1981.
- Synder, Norman, et al. *The Photography Catalog*. New York, New York: Harper and Row, 1976.

Other Resources

- McDonough, Maureen, and Cheryl Dyer "Community Parks and You." East Lansing, Michigan: Michigan State University Cooperative Extension Service, 1982.

MICHIGAN STATE UNIVERSITY



COOPERATIVE
EXTENSION
SERVICE

MSU is an Affirmative Action/Equal Opportunity Institution. Cooperative Extension Service programs are open to all without regard to race, color, national origin, sex, or handicap.

Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824.

This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by the Cooperative Extension Service or bias against those not mentioned. This bulletin becomes public property upon publication and may be reprinted verbatim as a separate or within another publication with credit to MSU. Reprinting cannot be used to endorse or advertise a commercial product or company.

1P-2M-10:83-UP-TCM. Price 45 cents.

O-14503