



4-H Bicycle Program

Unit I - Your Bicycle and You

Bike Riding is Fun

Bicycling is "fun on wheels" for people of all ages. You can start as soon as you can reach the pedals of the smallest bike and learn to balance yourself.

Bike riding is good exercise, too. It gets you out in the fresh air. It helps build strong arms and legs.

Your bicycle is fast transportation. It gets you to where you want to go and back quicker and easier than walking. You can ride your bike to school, to the store, to the park or swimming pool. You can even take trips on your bike around town or across country. You can also play games on your bicycle.

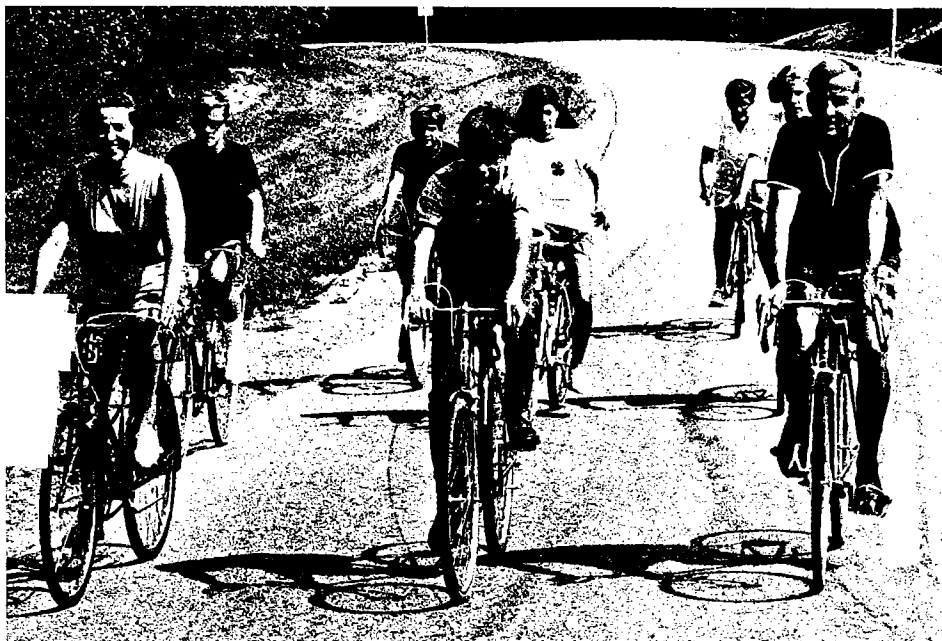
But you have responsibilities, too. This means you must know how to ride correctly, follow safety rules, obey traffic laws, take care of your bicycle, and respect the rights of others.

The 4-H Bicycle Program is designed to help you make the best use of your bicycle. You will learn how to ride it properly and safely, how to keep it in tip-top condition, and how to have the most fun with it. Your reward will be more pleasure from your bike, more confidence in your riding ability, and an official 4-H Participation Certificate.

Get to Know Your Bike

There are three basic styles of modern bicycles. The first is the typical middleweight. It has a curved-bar frame, heavy wheels, and wide, soft tires. Built for durability, it is comfortable for boys and girls because of its low riding position.

A second style is the lightweight or racing bike. It takes little effort to ride and is capable of high speed. It has narrow, high-pressure tires. They are designed for speed rather than a soft ride. This bike is usually preferred for sports and touring.



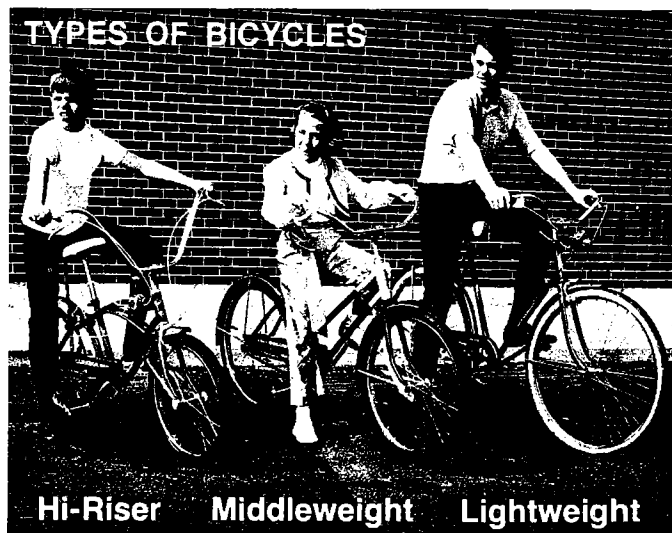
A third style of bicycle, the "hi-riser," is designed mainly for fun. Its compact size makes it highly maneuverable. This bike is most popular for neighborhood trips and fun riding.

Which style of bicycle do you have? Since you need a bicycle for this project, you probably already own one. But if you don't, you may want to consider the different points about each style before obtaining one.

Now study your bicycle. How many different parts can you identify? You probably already know the seat or saddle, handlebars, pedals, chain, horn, reflector, stand, front and rear mud guards or fenders, and spokes.

The frame has several parts. Can you name them? How about the rear wheel sprocket, front hub, crank, wheel rims?

Inspect the condition of your bicycle. Take hold of the front wheel with one hand and the end of the



CHECK POINTS FOR SAFE RIDING AND MORE BIKE FUN



Wheel alignment



Seat



Tire inflation



Handlebars

You are expected to know and observe all traffic signs and signals. That means you must stop for stop signs and red lights just like an automobile. You also must observe slow, caution and yield signs, as well as special signals such as those at railroad crossings.

Even though you can't ride as fast as an automobile, you can speed too fast for conditions such as busy streets or wet pavement. Never ride in the center of the street.

Here are some other "rules of the road" for bike riders: Carry only one rider per seat. Keep both hands on the handlebars except when signaling. Ride in single file. Never "hook on" to a moving vehicle. Use a carrier or basket for packages. Watch traffic behind you as well as ahead. Wear white or light-colored clothing when riding at night. Do not park your bike on the sidewalk or where people or motor vehicles may run into it; use a rack or your kick stand. Stop for cross traffic. Walk your bike across heavy traffic areas.

Have Fun Safely

Rules and traffic laws will help you have fun on your bicycle. When everyone obeys them, traffic moves smoothly and no one gets hurt.

There are many tests of skill and games you can play on your bike. One is the Figure 8 test in which you ride around a double-lane course laid out like an "8" without touching the edges.

Check your riding skill with the balance test, riding through a narrow lane without touching the sides. Have a contest on signaling, mounting or dismounting. See how small a circle you can turn around in; try it the other way. Make a sudden turn and quick stop in a limited area.

Another test of skill is to set up an obstacle course of eight cans placed in line eight feet apart. After the last can, mark off 16 feet and then a five-foot chute, 12 inches wide. Begin on one side of the first can and ride at a steady speed through the course, weaving inside and out around the cans, alternately. You must wind up in the chute within 12 inches of the stop line without touching the cans or sides of the chute.

Try a different test or game at every meeting. It will be fun and will help improve your skill as a bike rider. See if you can invent a new game of your own.

Take Care of Your Bike

Remember, if you take care of your bike, it will take care of you. You have already learned about adjusting and riding your bike properly, checking tires, parking, and following the rules.

You should have a lock for your bike and use it whenever you park it away from home. The most common lock fits around the rear frame fork and locks with a key or dial combination. It prevents anyone from riding the bike, but it doesn't stop someone from carrying your bike away.

You need a strong chain fastened to a solid rack or other firm support to guard against that kind of theft. But even the best locks and chains can't protect your bike if you leave it in a driveway, the street, or in an out-of-the-way place where it can be easily stolen.

Washing and waxing will keep your bike looking new. You will take more pride in riding it. Your friends will admire it and they will think better of you. Good care will prove that your bike is important to you.



ACKNOWLEDGMENT

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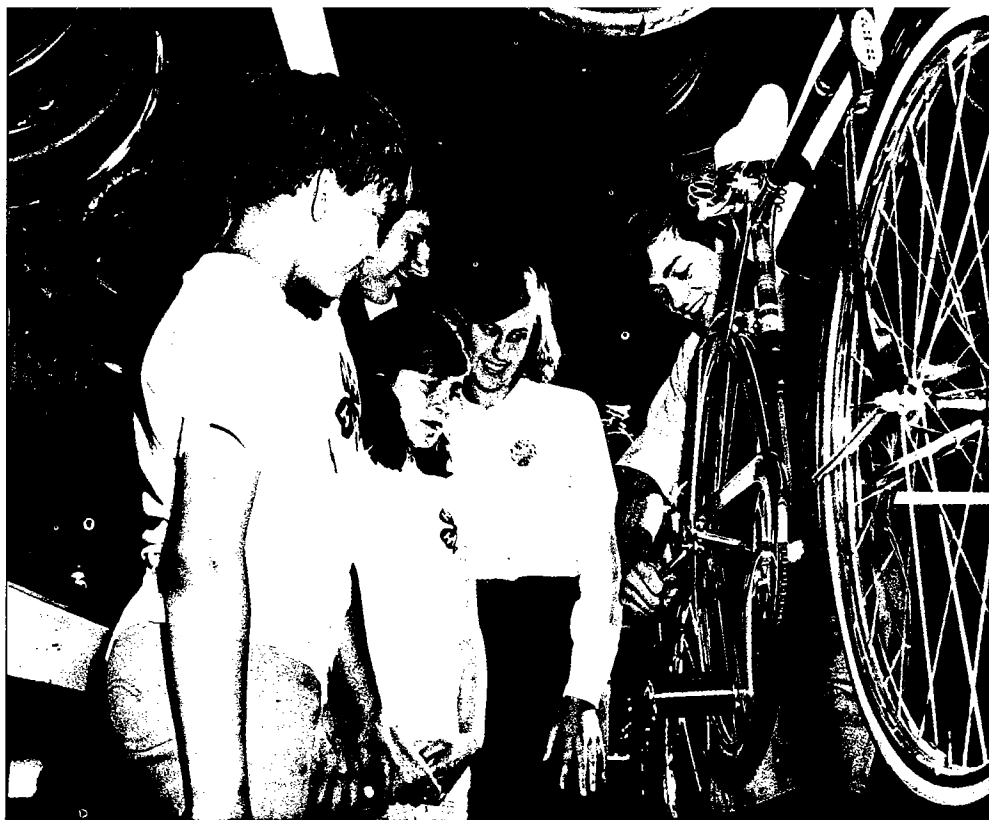
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4-H Bicycle Program

Unit II - Maintaining Your Bicycle



Keep Your Bike in Good Condition

Before beginning Unit II, review what you have learned about Your Bicycle and You in Unit I. Check your knowledge and understanding of the three main types of bikes; parts of the bicycle; how to adjust the seat, handlebars, and chains; how to care for your bike — tire inflation, oiling, cleaning, waxing; rules of good riding and traffic safety, and how to protect your bike against loss or theft.

Above all, you should have a feeling of confidence in your riding ability and your bicycle. You should be able to have fun on your bike safely.

Even the best machine, however, needs adjusting or fixing now and then. Your bicycle is no exception. No

matter how much attention you give it, your bike will need repairs or major adjustments at some time.

Visit your local bike shop. Ask the serviceman to explain the adjustments and repairs he is best equipped to make. These include adjusting brakes, cleaning bearings, and properly aligning wheels for safe operation and least tire wear. You can replace broken spokes yourself, but it is often better to let him do that, too.

If your bike needs repairs or major adjustments, watch him perform them. It will help you understand how your bicycle is constructed. You will receive valuable pointers on how to keep it running smoothly.

Even if your bike seems to be in perfect condition, it's a good idea to have a general check-up every six months. Ask your bike serviceman about it.

Trimming a wheel



Adjustments and Repairs You Can Make

Does your bike still fit you? Check the seat and handlebars to be sure they are adjusted correctly. Chances are you have grown in the last year and that some adjustments are in order. You will enjoy a more comfortable ride if the seat and handlebars are right for you. You will be safer, too.

You can't always have a bike shop handy. There will be times when you will need to make emergency repairs yourself. You may be on a trip away from town. Or you may be unable to get help.

Learn how to patch a tire. Punctures are normal hazards of bike riding. Even though you stay out of junk-filled alleys and keep away from areas of broken glass or new home construction, you can pick up loose nails or stray pieces of glass anywhere.

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Adjusting Coaster and Hand Brakes

Brakes and gear-shifting mechanisms are the most critical areas of bicycle maintenance. You should not attempt to adjust either unless you are thoroughly qualified to do so. Most young riders should take their bikes to trained servicemen for gear-shifting or brake adjustments.

There are two main types of coaster brakes, American and foreign, and several modifications of each. American-style coaster brakes are always adjusted from the sprocket side. Foreign-style brakes are adjusted from the opposite side.

Coaster brakes normally need little attention. The moving parts in the brake are rugged and will last a long time with reasonable care. If your brake starts to slip or fails to stop you effectively, take your bike to your serviceman immediately. He can take it apart, clean, adjust, repair, and put it back together safely.

Consult your bike owner's manual for instructions on how to adjust hand-operated caliper brakes. First, it is important for you to keep the sides of the wheel rim that contact the brake shoes clean and free of dirt, lubricants, and wax. You can also adjust the control cables if you know how.

There are three main components of hand-operated caliper brakes: the caliper assembly with brake shoes, hand lever, and control cable. The cable connects the caliper assembly to the hand lever. It is adjusted by changing the position of the adjusting barrel in the caliper arm.

The first step is to loosen the adjusting barrel locknut and turn barrel counter-clockwise out of caliper arm until brake shoes are about $\frac{1}{8}$ -inch from wheel rim. However, if adjusting barrel is unscrewed all the way before adjustment can be made, screw it back again and loosen cable anchor bolt nut. Then, hold brake shoes about $\frac{1}{8}$ -inch from wheel rim, pull cable through anchor bolt, hold taut, and tighten cable anchor bolt nut.

Adjusting brakes



You can do this until lugs on brake shoe contact surface have been worn off and are no longer visible. Then you will have to replace brake shoes and readjust cable.

Check all bolts and nuts of caliper and hand lever assemblies periodically to be sure they are securely tightened.

Hand-operated caliper brakes on derailleur-equipped bikes are of three different types. All have the same basic components, however, and are adjusted in the same manner.



Plan a Hazard Hunt

As a bike rider, you can help your community identify and get rid of dangerous hazards to safe cycling. Many of these same hazards may endanger motorists.

With the help of your leader and local police officers, make a list of potential hazards to safe bike riding. Here are a few examples: broken pavement; chuckholes; bushes or trees growing too close to a corner; busy street intersections without "Stop" or other warning signs; a "hidden" driveway; broken glass, nails or other debris in the street; no street lights or broken lights; slick pavement that might be dangerous when wet.

With your club, plan a hazard hunt in your neighborhood or community. Take your checklist with you. Note potential hazards. See how many each member can identify.

Report hazards to proper local authorities or the persons concerned. Getting rid of major hazards may require official action. Often, though, you will find that a friendly reminder from you as a 4-H member will accomplish wonders. No thoughtful person wants to be responsible for accidents.

Just as maintaining your bike in good running order means more enjoyment for you, maintaining the streets and riding areas of your community contributes to the safety and pleasure of all. For all bike riders, it spells more "fun on wheels."

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