ATV Safety

Claiborne County 4-H

8th Grade

OBJECTIVE:

Students will learn the history of ATV's.

Students will learn why government regulations can drastically affect ATV usage.

Students will basic safety rules for operating ATV's..

Students will explore environmental aspects of ATV usage..

ATV Safety

ATV's are everywhere these days.

ATV usually refers to 4-wheelers but can also mean dirt bikes, side-by-sides, and about anything meant to go off-road.

How many people in this room either have or ride ATV's?

We use ATV's for a lot of things these days, mostly for fun.

What are some industries that use ATV's?

- Agriculture
- Emergency Services
- Forestry
- Utility companies
- Military

This is an introductory slide to show how many folks in the room actually use ATV's (most of them).

Ask the class to name some industries that use ATV's. There will be a list pop up but the students can likely name industries not on the list.

The first picture is a wedding cake topper to illustrate that ATV's are, indeed, everywhere! The second picture is a wildland firefighting ATV.

ATV Safety

Before we start talking about safety, lets take a look at where ATV's started.

Some of the very early ATV's were built to meet the needs of the military.

The American GP or 'jeep' and the German Kettenkrad were developed during World War II. These vehicles helped troops move quickly in rough terrain.

By the 1960's, the original Army 'mule' was in use during the Viet Nam War. The mule was used to move cargo around forward operating bases.

This slide introduces a bit of history concerning ATV's. Military usage got things started with the Army GP Vehicle or 'jeep'. The German vehicle in the second picture is pretty odd but was used for the same purpose. These kinds of vehicles were used along side motorcycles.

The Army mule in the third picture was still in use until very recently for moving smaller amounts of supplies.

ATV Safety

Some of the earliest ATV's for civilians, besides the Willys Jeep, were 6-wheeled, amphibious vehicles like the Skippers from the 1960's.

Then, in 1970, Honda changed everything with the introduction of the US 90, a three-wheeled ATV that you straddled like a motorcycle.

3 wheelers became popular for both work and play until 1987 when a ban on the sale and manufacture of 3 wheelers was enacted by the US gov't.

Why was this done?

This slide is some history but the important picture is the second one showing the blue Honda three-wheeler. This machine eventually led to the four-wheelers everyone loves today!

Take some time to discuss the US Gov't.'s ban of three wheelers and why they did it (too many injuries). Point out to the class that this could happen again with four-wheelers. A lot of the class will not believe this can happen. Point out that no one thought three-wheelers would be banned, either (I know, I was there).

ATV Safety

So the Government determined that 3-wheeled ATV's caused more than a normal amount of injuries and decided to ban them in 1987.

ATV manufacturer's, led by Suzuki, had already started producing the 'next big thing' – 4-wheelers!

4-wheelers are much, much more popular than 3-wheelers ever were.

Do people still get injured on 4-wheelers?

Could the Government ban 4-wheelers like they did 3-wheelers?

What can we do as riders to ensure 4-wheelers get to stay?

BE SAFE!

This slide asks the class several questions related to the banning of three-wheelers and the reason behind it.

As the questions pop up, make sure you allow the class to discuss each one before moving on.

The whole point to this slide and the previous slide is that if injury numbers run too high the US government can ban four wheelers whether our 8th graders think it's possible or not!

ATV Safety

What is the number one thing you need in order to operate an ATV safely?

COMMON SENSE!

Yeah, I know, you expected me to say 'helmet'.

Applying common sense prevents accidents from happening which is even better than protecting you after an accident does happen.

Of course, you still need to wear a helmet!

Lets go over some safety rules....

Now we get into the safety part of the lesson. Our 8th graders will make sure you know how unsafe, and therefore cool, they are on four wheelers. Just play along and don't let them tell too many stories.

Stress to the group that before anything protective gear such as helmets are used, COMMON SENSE can prevent serious accidents and injuries. Point out that it is better to avoid an accident than to survive one!

ATV Safety

1. An ATV is not a toy! Children should only be allowed to operate an ATV under the supervision of a responsible adult.
2. Always operate an ATV that fits you – you can reach all of the controls properly and when stand on the footpegs there is 3 inches between the ATV's seat and the seat of your pants.
3. Wear protective clothing – helmet, eye protection, boots, long pants, long sleeved shirt and gloves.
4. A proper fitting helmet can save your life! Make sure your helmet is approved by one of the following agencies: DOT, Snell Institute, or ANSI.
5. Never ride alone and always make that someone knows where you are going to be riding.

This slide begins the list of safety rules. The class won't enjoy these rules because its cool to be unsafe but make sure to go over each one. You can ask for discussion or ask the class to explain what they think each rule means. Make them THINK!

The picture at the end show a little girl on a small four wheeler. She has a helmet (good) and is on a machine that fits her (good). However she has no eye protection (bad) or any other protective equipment (bad).

ATV Safety

6. An ATV is designed to carry one person – carrying a passenger greatly increases your chance of having an accident.
7. Do not ride in bad weather.
8. Read your owners manual carefully. If you don't have one, contact the manufacturer or dealer and get one.
9. Do not ride on paved roads or on any public road.
10. Riding at excessive speed is the #1 way to get to the hospital.

Bad Idea!

This slide finishes up the safety rules. See the first paragraph above.

The photo at the end show two cute kids on a four wheeler. They are on a youth-sized machine (good) however, they have no protective equipment what so ever (very bad) and there are two people on the four wheeler (bad).

ATV Safety

Let's change gears and talk about the maintenance of your ATV.

Can the maintenance you do (or don't do) affect the safety of your ride?

You better believe it!

In addition, ATV's are very expensive. A well maintained ATV will last for 20 years while not doing the proper maintenance can shorten the life of the machine to as little as 5 years.

Think of it this way:- a 2012 Honda 420 4X4 costs $6,000
- if I run it for 15 years, my cost is $400 per year
- if I run it for only 5 years, my cost is $1,200 per year

These machines are EXPENSIVE!
Keep them running as long as possible.

Now we change gears (no pun intended) and talk about keeping our ATV's in good working order.

Point out that properly maintaining our ATV can help us have a safe ride AND vice versa. For some reason, 8th graders also think that doing maintenance on an ATV (changing oil, filters, etc.) is also un-cool.

Point out that these machines (which parents have bought) are very expensive. You owe it to your parents to make sure your four wheeler lasts as long as possible.

ATV Safety

An ATV in good condition will give you a lot more enjoyment. Nobody wants to get ready to ride and find out your ATV won't start. Or worse yet, get out on a trail and break down. Hope you've got a buddy who can tow you home!

TIRES: Maintain the recommended tire pressure in all four tires. Underinflated tires cause the machine to steer poorly. Overinflated tires wear badly. Check for cuts and gouges that can cause leaks.

WHEELS: Make sure lug nuts are tight. Grab the front tire at the front and rear and rock it on the axle to see if there are loose or worn bearings.

CABLES: Make sure that the throttle and all other cables are working smoothly. Throttle cable should snap back smoothly when released. Remember – cables need to be lubricated!

This slide and the following two slides talk about some of the systems on an ATV that should be checked periodically in order for the machine to 1) operate safely, and 2) last a long time.

Just go over these points and, if you don't know much about mechanics, get the class to discuss them. There will usually be at least one 'gearhead' in the class who actually knows a bit about how an ATV works.

ATV Safety

BRAKES: Make sure that both hand and foot controls engage and release smoothly. Be sure to check the condition of the brake pads or shoes regularly especially if you ride a lot in water. See your owner's manual.

GEARSHIFT: Lever should be firmly attached and work without hesitation. It should be adjusted to the proper position for your foot to engage it easily.

OIL & FUEL: Check engine oil when engine is off. Change oil at recommended intervals – This Is The Life Of Your Engine! Always use fresh fuel. Always check for fuel leaks.

ATV Safety

DRIVETRAIN & CHASSIS: Inspect chain for proper tension and lubrication. Check driveshaft, U-joints and differentials for oil leaks and lubrication. Check the oil in your differentials at recommended intervals. Grease all fittings at recommended intervals. Check for loose bolts and nuts before each ride.

TOOLKIT: After inspection, make sure you have an adequate tool kit that allows you to make common field repairs.

This is the last thing you want!

ATV Safety

Last but not least, let's talk about how ATV's affect our environment.

Stop and consider this statement and then tell me if you agree or disagree with it and WHY you agree or disagree with it.

All ATV's should be banned from public land because they cause erosion, destroy plants, disturb animals and hikers and contribute to pollution.

There are a lot of folks out there who would like to see all motorized vehicles banned from using public land for the reasons stated above.

ATV's do not have to tear up trails, cause erosion and disturb animals and hikers. However, this is exactly what happens in some cases. This is what gives all off-roaders a 'black eye.'

This slide introduces the class to some of the environmental aspects of ATV usage. Read the statement and have the class think about it for a minute before answering.

Most will react without thought and condemn the statement. Discuss that the statement talks about public land not private land and that all of us have seen examples of erosion and garbage left by off-roaders.

The point is to be responsible riders, another thing that is 'uncool' for the 8th grade crowd to admit.

ATV Safety

So what can be done to try to avoid losing riding privileges on public land?

- Be Responsible!
- Travel only in areas open to all-terrain vehicle (ATV) use.
- Minimize wheel spin. On switchbacks, avoid roosting around the apex of the turn when climbing or brake-sliding during descent, both of which gouge the trail. Drive over, not around obstacles to avoid widening the trail.
- Slow down when sight lines are poor. Cross streams only at designated fording points, where the trail crosses the stream.
- Comply with all signs and respect barriers.
- Buddy up with two or three riders, reducing vulnerability if you have an accident or breakdown. Designate meeting areas in case of separation.

This and the following slide talk about responsible actions for responsible riders. Following the guidelines on these two slides can help take the argument away from those who want to ban ATV's from all public lands.

ATV Safety

Some more things to think about...

- Leave gates as you find them. If crossing private property, be sure to ask permission from the landowner(s).
- Yield the right of way to those passing you or traveling uphill. Yield to mountain bikers, hikers, and horses.
- Proceed with caution around horses and pack animals. Sudden, unfamiliar activity may spook animals possibly causing injury to animals, handlers, and others on the trail.
- When encountering horses on the trail, move to the side of the trail, stop, turn off your engine, remove your helmet, and speak. You want the horse to know you are human. Ask the rider how to proceed.
- Keep speeds low around crowds and in camping areas.
- Keep the noise and dust down.

This slide does give some specifics for sharing the trail with horses. Not all horses are used to loud engines and fast moving machines. Racing by or around riders on horseback can spook horses and cause serious accidents and even death.

Please be considerate of horses. They are our original ATV's!

ATV Safety

REMEMBER: Don't do this.....

... or you might wind up like this!

This is my 'just for fun' slide.

This is COOL!

DTV Shredder:

It's a cross between a dirt bike and a skateboard.

How cool is this?

This is also for fun and for a huge COOL factor. This is DTV Shredder. It's the brainchild of a couple of MIT grads looking to make an adventure/sport machine. Now the military is buying them.

Look them up on line and watch the YouTube videos. These things are cool!