

Using Machinery in an Educational Context.



Guidance, Risk Assessments and Over Arching Lesson Plan

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Sources

- HSE Preventing accidents to children on farms.
- Safe use of all terrain vehicles (ATVs) in agriculture and forestry.
- Google. - What is the minimum age to drive a golf buggy?

Context

Currently we have a variety of machines some of which are used to educate our learners on land management tasks at different ages and stages of ability. These being

- Petrol hedge cutters.
- Push petrol lawn mowers.
- Ride on lawn mowers
- Ride on small tractor
- Ride on small tractor with grass cutter
- Large agricultural tractors
- Strimmers
- Golf buggies
- All terrain vehicles (ATV)

Advice from HSE is within the context of undertaking 'Work' tasks in a commercial context. For example, it does not differentiate between a powerful ATV used in a commercial sense and a low powered golf buggy used in a educational or recreational sense. When 'Googled' - what is the minimum age to be able to drive a golf buggy? It made reference to laws in different 'States' within the context of the age a child could drive the buggy independently on a golf course (13/14 years) which again is a highly differing context to driving in a field with an instructor sitting next to you.

Over the years of Pear Tree providing agricultural activities and training to our population the ability to use machinery has been hugely significant in terms of

- Inspiring children to want to learn more.
- Motivating children to be engaged in their education.
- Training children to become employable adults.

There is also a significant therapeutic benefit which cannot be understated. The Pear Tree population have in all but a few instances suffered trauma, adverse child hood experiences at best. This abuse has a disempowering process both during and long after the event whether that be a one off incident or more likely sustained over a period of time. Being in control or 'striving to be in control' often takes on an obsessive quality which is directed towards authority and care givers closest to those concerned and invariably with negative consequences.

The Pear Tree Therapeutic Approach identifies this and encourages activities which seek to promote self esteem, self choice, independent thinking and building positive relationships. The ability to relearn relationship building and exercise responsible control is clearly evident in the work undertaken with animals such as horse riding.

However, this overriding need to control which is often seen with obsessive use of computers and gaming is in our community redirected towards the use of machinery tools in an educational context which in itself has a high therapeutic context also as set out in our document "The value of routine and practical tasks within an education programme".

The ability to use such tools has proved invaluable for many years and as a result we have a desire to continue to use such machinery within the law.

As Pear Tree School is an unusual facility it is not surprising that advice from national agencies does not cover our unique situation. It is therefore my responsibility to consider the advice from other agencies, identify the differing context and undertake risk assessments to accurately reflect the level of risk encountered and identify what may be ok to do and what definitely is not ok to do.

These activities will need to be under regular review and may be subject to change. The risk assessments will be specific about who can do what, where, and must not be deviated from. To do so may result in the withdrawal of the activity.

In August 2001 Pear Tree projects bought the first of our farms, Toy Top Farm. It was at the time to be a company head quarters, admin base, and activity centre. At that time our Health and Safety officer, a well respected retired policeman, on hearing my proposed uses stated - "David, use it as your office, use it for your family but don't let the kids in care anywhere near!"

Had I taken that advice what has been a long history of significant help and rehabilitation would never have happened.

In 2005 Toy Top Farm became a registered school and the educational progress of the children, based on our approach has been at the centre of six outstanding inspections. Therefore, the temptation to reduce all risk is increasing but must be tempered with a cautious determination to continue to teach children about risks, how to engage in positive risk taking behaviour and engage safely. The effect of not doing so is in my view in the long term more dangerous.

It is therefore important that the 'farm' environment remains authentic and not clinical or a sanitised version of a farm. Students have to learn how to live with risks, identify them and manage them. It is the teachers and instructor's role to manage that process.

To be able to guide us through the complexity of this subject first of all I want to consider key points of the HSE guidance. This is for reference and greater understanding only.

- Farms are dangerous places.
- Children should be kept away from commercial activity.
- Children under the age of 13 are not allowed on or in any machinery.
- Children over the age of 13 can be taught how to drive a large commercial tractor providing the instructor is qualified to do so.
- At thirteen they are allowed to use a tractor to pull attachments which don't have moving parts such as harrows and rollers.

- Children have to be over the age of 16 to use a machine with attachments that have working parts, such as a tractor with a grass cutter.
- Children have to be over the age of 13 to be allowed as a passenger in an ATV.
- Children over the age of 16 are allowed to drive an ATV.

It is my observation that most of the commercial farmers I know take absolutely no notice of the above restrictions at all. However, the list of commercial farmers who have accidents appears frightening to consider. I have always been of the view that no accident is acceptable and as well as harm to the casualty, could result in the end of this operation.

Just because we 'can' does not necessarily mean we 'should'.

The key milestones identified are 13 years and 16 years. Whilst it is ok to learn to drive a tractor at 13, we currently have this restricted to year 10 which (15/16)

It is now acknowledged in our procedures that a child has to be 13 years old even to be a passenger on the Polaris ATV even though this will not be doing commercial work.

No child or staff other than approved drivers are allowed to drive the Polaris ATV.

At this point it is worth considering the risk that go with different machines at different times. I think it would be helpful to consider machinery in four contexts.

Category 1/ Domestic and leisure.

- Miniature tractor with wheel barrow trailer.
- Golf buggies.

These can be undertaken at any age under constant supervision and direct control of an instructor considering specific activity risk assessment.

Category 2/ Agricultural and horticultural.

- Small garden strimmer.
- Small push petrol lawn mower.
- Be a passenger on the ATV
- Be a passenger on a farm tractor with a second seat. (A)
- Be a passenger on a farm tractor but being allowed to use the controls. (B)

The above can only be undertaken over the age of 13 with constant observation and direction of an instructor.

Category 3/ Industrial and commercial.

- Petrol hedge cutter.
- Full size (cow horn handle) Strimmer.
- Plant potatoes sat on a potato planter.
- Ride on lawn mower.
- Small tractor with grass cutter.
- Regular farm tractors. Independently.
- A.T.V gator – 2 seater

The above can only be undertaken over the age of 16 with constant observation and direction of an instructor. The regular farm tractor has two seats in to allow side by side instruction and is therefore more suitable to start with than the above smaller tractor. The instructor must be an approved instructor. The gator is a diesel powered machine. It is slower than the Polaris and suitably placed between a golf buggy and the Polaris.

Category 4/ Restricted machines

- Chainsaws
- Long reach chainsaw and hedge cutter
- ATV Polaris 4 seater
- Tractors over 100hp independently

These vehicles are never to be used independently by young people of any age and restricted to approved drivers/operators only.

The Risk Identified: CAT 1 - Suitable for any child whilst under the direct constant supervision and control of an instructor or carer. The instructor or carer must be in total control of the vehicle at all times even when the child is sat in the drivers seat. Children over 13 can be given more responsibility and observed from a distance.

COUNTAX - Miniature tractor. (If with a cutting deck, this is disengaged at all times.)
GOLF BUGGIES.

Why do it?

This is a small machine that has few controls and is suitable for a child or young person to learn to drive. This begins the process of managing spacial awareness and a good introduction to controlling machinery in the real world as opposed to a virtual world. It teaches children the advantages of having a machine to assist in a task and also begins the process of children thinking through strategy and working out its utility. The Countax miniature tractor can pull a wheel barrow as a trailer and is an excellent tool to teach the concept of reversing trailers. Both vehicles inspire children to want to learn more and satisfies the need to 'control', it is an excellent reward and demonstrates trust.

Who could be harmed: By standers and driver.

Is the risk: High Medium Low

Action to be taken to reduce/remove risk:

- All students at any age to be shown how to fill machines with fuel, oil, and instructed on the dangers of both in terms of being a flammable liquid and from swallowing.
- Student to be shown how to start and stop machine. How to use clutch / break (countax - in this vehicle are the same one actioned pedal.)
- How to manoeuvre and do an emergency stop.
- Student to demonstrate competency in the above.
- Instructor / carer to ensure the child is suitable for instruction prior to using the machine. The criteria is that the child must be able to and does follow specific instructions and will do so throughout the time using the machinery.
- Instructor to ensure the student remains under their supervision and control throughout the time using the machine.
- Instructor to warn and remove any bystanders that could be at risk of collision.
- Instructor to ensure the area used and the ground passed over is flat, and suitable to the driver's ability.

Where can this be used?

- Around the farm or stable yard. In flat fields.



The Risk Identified: CAT 2 - Suitable only for children over the age of 13 and under the constant supervision and direction of an instructor. Young people over the age of 16 can be given more responsibility and observers from a distance when appropriate.

SMALL GARDEN STRIMMER AND SMALL PUSH LAWN MOWER.

Why do it? These machines are domestic and found in many family homes. As such most children lucky enough to live with green spaces will be familiar with these and likely to be taught to use them by parents or family members.

An underpinning principal of this organisation is that children in our care should not miss out on learning life skills because they are in care or because of administrative anxieties of carers or instructors.

They build on skills learned from CAT 1 and expose the child to the concept of managing risk, taking precautions and following risk assessments.

They also give children the opportunity to experience the control and effect of small machinery. Both machines inspire students to want to learn more and be involved in their education and maintaining the environment they live and work in.

Being competent in these skills is important to being able to use larger machinery such as tractors that they are old enough to drive at thirteen but need to be able to demonstrate progression with skills and understanding.

Who could be harmed: Student under instruction, instructor and by standers.

Is the risk: High Medium Low

Action to be taken to reduce/remove risk:

- Instructor to ensure student is suitable for instruction. The criteria for instruction is that they can follow specific instructions and will continue to do so throughout the duration of the activity.
- Instructor to ensure the student remains on task and under control and supervision during the activity. Any concerns or indications this is not the case the activity should be stopped.
- Student to wear appropriate PPE throughout.
- Instructor to ensure there are no by standers who could collide with the machinery.
- Student to be shown how to start and stop the machine. How the 'dead mans handle' works.
- Student to be shown how the machine works and the dangers it presents.
- Student to be shown the area to be cut and the boundaries not to be crossed.
- Student to be monitored throughout the activity.

Where can these be used?

- Garden lawns, farm yard and small paddocks only.

The Risk Identified: BE A PASSENGER IN A TWIN SEATED TRACTOR. (A)

Why do it? To inspire students to want to learn more about farming and agriculture.

To allow the student to become familiar with the tractors controls and the varying different farming practices the tractor performs.

Who could be harmed: Student and tractor operator. The risk the student is exposed to is the same risk as the tractor operator. In addition, the tractor operator is at increased risk if the driver has to leave the tractor for any purpose leaving the student sat in the stationary vehicle but access to controls.

Is the risk: High Medium Low

Action to be taken to reduce/remove risk:

- Student to be a passenger must be over the age of thirteen and meet the criteria to do so. This criteria is that they are able to follow specific instruction and will do so throughout the activity.
- Student also meets the criteria of being a young person who has the interest and desire to want to learn more about farming and agriculture and for whom being exposed to this kind of activity could be significant to their progression. This is not an activity done for fun!
- Instructor / Tractor driver to give specific instructions on where to sit, what to watch, what not to touch.
- In the event that the tractor driver has to stop and exit the vehicle specific instructions about remaining seated and not moving or even touching anything to be given.

Where can this be done?

- As the activity is being a 'Passenger' this can be done with most farming practices as long as it is on flat terrain.

The Risk Identified: BEING CARRIED AS A PASSENGER ON THE ATV/RTV/UTV

ATV is the Polaris 4WD

Why do it? Being a passenger on the ATV in terms of living and working in a rural environment is similar to using other forms of transport in an urbanisation. It allows you to get to places of interest and other activities in a way other vehicles would not be appropriate. It is also good fun and inspires students to want to be involved in the farm and associated activities.

Like all forms of transport, it comes with variable risks.

Who could be harmed: Student being a passenger. Most likely risk is falling out of the vehicle because the student doesn't respect the vehicle and behaves differently to being a passenger in a car due to it being open and misperceived reduced risk due to moving at a lower speed. Student unaware of the impact of driving on rough terrain.

Is the risk: High Medium Low

Action to be taken to reduce/remove risk:

- The driving of the ATV is restricted to named drivers deemed competent by the M.D.
- All passengers whether adult or child must wear seat belts at all times.
- Students to be a passenger must be over the age of thirteen and meet the criteria to do so. This criteria is that they are able to follow specific instructions and will do so throughout the activity.
- All passengers must be briefed about keeping arms and legs within the vehicle at all times. They must not exit the vehicle until it has come to a stop and been given the go ahead by the approved driver.
- Anyone considered a risk of failing to comply with instructions must not be allowed to be a passenger on this vehicle.

The Risk Identified: BEING A PASSENGER IN A TWIN SEATED TRACTOR (B) SWAPPING SEATS AND USING THE CONTROLS.

Why do it? To take the process of becoming familiar with the tractors controls to the next level, with the vehicle in the total control of the instructor / driver who is remaining in the seat sat next to the student and has access to the full control of the tractor at all times.

Who could be harmed: Student and tractor operator. The risk the student is exposed to is the same risk as the tractor. In addition the tractor operator is at increased risk if the driver has to leave the tractor for any purpose leaving the student sat in the stationary vehicle but access to controls.

Is the risk: High Medium Low

Action to be taken to reduce/remove risk:

- All of the above factors remain relevant and the student has experienced time sat at a non participant passenger. As the instructor/ driver is still in total control there are no expectations of assessing skill or competence or of providing instruction on what to do. They are simply becoming more familiar with the concept of driving at a safe time to do so.

When and where can this be done?

With any farming practice on flat ground away from bystanders in a field. Not to be done in the farm yard area.

This can only be done with an approved instructor with experience in excess of 10, 000 hours.

The Risk Identified: CAT 3 - Must be over the age of 16.

The common factors in this category is that they involve moving parts that can cause injury.

PETROL HEDGE CUTTER.

Why do it? This is a small hand held machine that is a good introduction to a variety of machines and their purposes. The prerequisite for this machine is that the student has become familiar with hand held manual sheers. This has not been mentioned earlier in this document as a hand held manual cutter is a tool and not a machine.

However the tool prepares a student to know how to cut hedges manually and of the required process. Using a petrol hedge cutter takes this skill to the next level of progression and allows the operator to cover more hedges more quickly, thus reinforcing the need for and advantage of machinery. It improves confidence, dexterity and demonstrates trust in machines with a higher level of risk as this machine can cut fingers as well as plants.

Who could be harmed: Instructor, student, by standers.

Is the risk: High Medium Low

Action to be taken to reduce/remove risk:

- Instructor to give demonstration on how to use and operate machine.
- How to start and stop.
- The dangers it presents and the need to hold correctly and not expose operators fingers to any part of the cutting machine.
- Instructor to ensure there and no bystanders that could collide with the machine at any time.

The Risk Identified: USING A FULL SIZE (Cow horn handle) PETROL STRIMMER.
CAT 3

Why do it? Being able to use such machinery in addition to the therapeutic benefits mentioned above is an important life skill. It means the student will be able to look after their own green areas in later life. It means they may be more useful to a voluntary organisation post discharge as part of their personal development. It means they may be more employable. It means they can build on the skills learned in earlier categories. It means they can make a positive contribution to managing the schools grounds and agricultural areas. This is a physically demanding task that requires a level of fitness and a high level of trust.

Who could be harmed: Instructor, student, bystanders.

Is the risk: High Medium Low

Action taken to reduce risk.

- Student must be over 16 years of age.
- Instructor to ensure the student is suitable to be taught this activity and meets the criteria to do so. The criteria to be allowed to do this task which is that the student must be able to follow specific instructions and will do so throughout the duration of the activity.
- The student has shown the ability to manage and demonstrate competence in CAT 1 and 2.
- Instructor to ensure the student can remain on task and responsive to direction throughout the duration of the activity. Any concerns or indications this may not be the case the activity should be stopped.
- Instructor to ensure there are no bystanders who could collide with the machinery or projectiles thrown up by the machinery.
- Student must wear full PPE throughout the activity. Including goggles, ear defenders, closed toe boots.
- Instructor must explain how the machine works. How the dead mans handle works and it's importance to keeping the operator safe. How to stop and start the machine.
- Student to be shown how the machine works and the dangers it presents.
- Student to be shown the area to be cut and boundaries as to where not to be crossed.
- Student to be monitored at all times. The level of monitoring may vary depending on experience, competency and the level of independence to be encouraged.

Where can this be done?

Gardens and agricultural land. No road sides or public areas to avoid the risk of encountering foreign bodies.



The Risk Identified: POTATO PLANTER
CAT 3

Why do it? It's really good fun, it plants the potatoes really well and covers a lot of ground quickly compared to planting by hand. It is a required task on the farm.

Who could be harmed: Instructor, student, bystanders.

Is the risk: High Medium Low

Action taken to reduce risk.

- Student must be over 16 years of age.
- This process is to sit on the back of the potato planter which is attached to the tractor and only driven by Senior Farm Staff. The tractor is to be driven slowly in a low gear throughout the time students or staff are sat on the planter.
- The risk to students come from falling off the machine if the student is not focused on the task in hand. Or from placing fingers in the way of the moving parts which separate and divide the potatoes.
- This task is able to be constantly monitored by the driver from the driving position who is able to stop quickly should an issue arise.
- Initial instruction is given by farm staff as to where to sit and how to plant the potatoes.
- Initially an adult from the staff team would do this task directly along side a student. Only when both staff and student are confident in the process is a second student who also has experience at this task allowed to join the process.



The Risk Identified: RIDE ON LAWN MOWERS.
CAT 3

Why do it? This activity continues to build on the skills learned in earlier activities and all factors described above are relevant with this machine 'and then some'. The sense of control and impact on the landscape is inspiring and highly motivating. This is also a stepping stone to being able to drive larger tractors which provides many transferable skills. Many of our students have gone on to successfully pass the driving test whilst in our care. The ease in which this has been achieved is thought largely to do with their experience on machinery ultimately tractors. The ability to drive is a hugely valuable transferable skill.

Who could be harmed: Instructor, student, bystanders.

Is the risk: High Medium Low

Action taken to reduce risk.

- Student must be over 16 years of age.
- Instructor to ensure the student is suitable to be taught this activity and meets the criteria to do so. The criteria is that the student will follow specific instructions and will do so throughout the duration of the activity.
- The student has shown ability to manage and demonstrate competence in all of the above activities.
- Instructor to be satisfied that the student will remain on task through the duration of the activity. Any indication that that is not the case the activity should be stopped.
- Instructor to ensure there are no bystanders that could collide with the machinery or projectiles thrown up by the machine.
- Instructor to drive the machine to the area of group to be worked on.
- Student must wear required PPE. This includes closed toes boots. Ear defenders may not be required initially due to needing to hear and follow instructions. As such these sessions must be in short burst of duration to avoid prolonged noise. When the student demonstrates competence and the ability to complete required tasks more independently, ear defenders should be used at all times.
- Instructor to show student how to start and stop the machine. Safety features on the machine such as 'dead mans seat'. Dangers that may be encountered.
- How the steering may be different to that which the student may be familiar with in the case of rear wheel steering.
- How to accelerate and decelerate the machine.
- How to apply the breaks.
- Student to be shown the area to be cut and where boundaries are.
- Student to be monitored at all times. Level of monitoring must depend on level of competence and experience.

Where can this be done?

Lawns and paddock.

Student not to drive in the farm yard area or car park. Away from any public footpaths.



The Risk Identified: SMALL TRACTOR WITH GRASS CUTTER. KABOTA. CAT 3

This tractor is a combination of both a grass cutter and a small farm tractor. This activity has all of the features and details mentioned above. It is however a bigger machine and therefore the only difference is the level of ability and experience shown in all other machines needs to be greater in order to use it as a grass cutter.

If it was to be used as a small farm tractor with implements the features below would become relevant.

Why do it? This activity continues to build on the skills learned in earlier activities and all factors described above are relevant with this machine 'and then some'. The sense of control and impact on the landscape is inspiring and highly motivating. This is also a stepping stone to being able to drive larger tractors which provides many transferable skills. Many of our students have gone on to successfully pass the driving test whilst in our care. The ease in which this has been achieved is thought largely to do with their experience on machinery ultimately tractors. The ability to drive is a hugely valuable transferable skill.

Who could be harmed: Instructor, student, bystanders.

Is the risk: High Medium Low

Action taken to reduce risk.

- Student must be over 16 years of age.
- Instructor to ensure the student is suitable to be taught this activity and meets the criteria to do so. The criteria is that the student will follow specific instructions and will do so throughout the duration of the activity.
- The student has shown ability to manage and demonstrate competence in all of the above activities.
- Instructor to be satisfied that the student will remain on task through the duration of the activity. Any indication that that is not the case the activity should be stopped.
- Instructor to ensure there are no bystanders that could collide with the machinery or projectiles thrown up by the machine.
- Instructor to drive the machine to the area of group to be worked on.
- Student must wear required PPE. This includes closed toes boots. Ear defenders may not be required initially due to needing to hear and follow instructions. As such these sessions must be in short burst of duration to avoid prolonged noise. When the student demonstrates competence and the ability to complete required tasks more independently, ear defenders should be used at all times.
- Instructor to show student how to start and stop the machine. Safety features on the machine such as 'dead mans seat'. Dangers that may be encountered.
- How the steering may be different to that which the student may be familiar with in the case of rear wheel steering.
- How to accelerate and decelerate the machine.
- How to apply the breaks.
- Student to be shown the area to be cut and where boundaries are.
- Student to be monitored at all times. Level of monitoring must depend on level of competence and experience.

Where can this be done?

Lawns and paddock.

Student not to drive in the farm yard area or car park. Away from any public footpaths.



The Risk Identified: FARM TRACTORS – Independently
CAT 3
Must be over 16 years of age

Why do it? This is the highest level of achievement a student can obtain whilst at Pear Tree School when it comes to driving machinery. It enables the student to be able to make a significant contribution to the farming practise. It commands the respect of their peers and other members of staff and is a transferable skill that can last a life time and take into many forms of employment.

‘As the Colonel in Charge of the Royal Horse Guards said to me “If they can ride well and drive a tractor they are ahead of most of our recruits”.

The ladder of progression continues with the level of difficulty of the task required depending on the time of year and by no means always achieved even by those students fortunate enough to be trusted to drive a tractor. Activities are whether and season dependant.

This activity is also reserved for those students who have a strong work ethic and for whom it is thought learning this skill will have an impact on their personal and professional development. It must have a direct link to their progression and future employment targets. It is not done for fun or to facilitate engagement.

In order of difficulty the process is:

- 1/ Sat in tractor as a passenger observing.
- 2/ Sat in tractor with an instructor and being allowed to steer and able to demonstrate precision with steering.
- 3/ Sat in tractor with an instructor being able to use the clutch and change gear.
- 4/ Sat in tractor with an instructor being able to use breaks and do an emergency stop.
- 5/ Sat in tractor with an instructor being able to pull a roller.
- 6/ Sat in tractor with an instructor being able to use different techniques to cover the area required ie - round and round, up and down at varying distances.
- 7/ Sat in tractor with an instructor being able to use harrows.
- 8/ Sat in tractor with an instructor being able to use different techniques to cover the ground required ie - round and round, up and down and varying distances.
- 9/ Being able to do 7 and 8 independently whilst observed by an instructor from outside the tractor.
- 10/ Being able to do 7 and 8 independently and observed by an instructor at a distance.

ADVANCED DRIVERS ONLY.

- 11/ Being able to use a PTO driven topper to cut fields with an instructor sat alongside.
- 12/ Being able to use a PTO driven topper independently.
- 13/ Being able to use a tractor to pull a trailer with an instructor sat alongside.
- 14/ Being able to use a tractor to pull a trailer independently.
- 15/ Being able to use a loader or bale spike to move bales with an instructor sat alongside.
- 16/ Being able to move bales independently.

It must be recognised that ‘advanced drivers’ are likely to have left our service and may return as farming volunteers to enhance skills and gain further experience. It is unusual to achieve this level of skill whilst in our school or service, but not impossible.

Risk level - Alongside and instructor – LOW, Independently - HIGH.

Who could be harmed: Instructor, student, bystanders.

Is the risk: High Medium Low

Action taken to reduce risk.

Driving tractor.

- Instructor to ensure student meets the above criteria to be allowed to learn to drive a tractor.
- Student to be gradually introduced to the above process over time to allow the student to become familiar with the different functions.

Before a student can drive independently, they must demonstrate the following:

- 1/ They are familiar with steering the vehicle and shown the ability to demonstrate precision driving.
- 2/ They are able use clutch and change gear smoothly.
- 3/ They are able to select gears appropriately.
- 4/ They are able to do an emergency stop.
- 5/ They are able to stop and restart the machine.

Using appliances.

- Student to be shown how to use different appliances over time to allow student to become familiar with the purpose and function of appliances.
- Student to be explained the risks these appliances present. Student to be instructed on not getting out of the tractor for any reason without first shutting the engine down.
- Student to be explained the risks these appliances present to animals or by standers. The risk of collision with either bystander or animal is an obvious one for all tasks.
- Student must only undertake these tasks on level ground.

Advanced drivers tasks.

- Tractor driver students pulling a trailer on farmland must have demonstrated competence with smaller wheel barrow trailers including being able to demonstrate an understanding of the concept of and competent at reversing a trailer.
- Moving bales with a loader or bale spike. Tractor driver must have demonstrated advanced skills in precision driving to be considered for this task.
- They must be briefed on the consequences of extra weight on the tractor and it's impact on the stability of the tractor.
- They must demonstrate a high level of competence before they are allowed to do this independently.
- The unseen risk is mainly associated with the use of the topper. The topper is a large heavy grass cutter dragged along the ground designed to cut the top off grass and fell nettles and thistles. With this machine there is a risk of missiles being thrown from the machine if it goes over rough ground.
- If the topper requires shear bolts replacing (bolts designed to break if they experienced too much pressure from hitting an obstacle) the driver must shut the machine down completely before replacing any shear bolts.
- Also, the correct starting procedure must always be used.
- Starting procedure for topper - PTO must be disengaged before starting tractor. Topper must be lifted off the ground initially. This must be done in the field away from any bystanders. When blade starts moving the topper is lowered to the ground.

(I know of an old experience farmer, now deceased, who was using a topper. He stopped for lunch and then when finished he jumped back in his tractor and turned the ignition on, he had left the PTO in gear. The topper immediately started working.

Unfortunately, this was a hot summer day. His beloved spaniel had crawled under the topper to get some shade and was macerated. When you hear this story, it reminds you of the need to follow procedures fully.)



The Risk Identified: Driving ATV Gator
CAT 3

Why do it? To develop driving skills that may lead to employability

Who could be harmed: Driver, Passengers, Bystanders

Is the risk: High Medium Low

Action taken to reduce risk.

- This vehicle can be driven by staff or students over the age of 16 years.
- They must have demonstrated competency with other vehicles under instruction.
- Students are allowed to use this machine independently. This must only be for specific tasks and must be after competence is demonstrated with an Instructor sat side by side.

Action taken to reduce risk.

Staff anywhere.

Student – farm tracks, flat fields, not in public car park.

Conclusion.

Whilst undertaking this review it has reminded me of the importance of using machinery in our school curriculum and its significance to many students who have gone through our service and are now successfully employed.

It is incumbent on me to remind everyone of the level of risks we encounter on a daily basis. As these risks are lived with, with such frequency they can become lost in the fog of day to day life. We become over familiar.

Likewise, those unfamiliar with this environment may overreact to the prospect of having to consider such risks and as such seek to remove them.

Removing risk is a short term solution which results in deskilled people who become risk adverse to all aspects of life. This can result in poverty caused by negative attitudes to risks and work tasks. Poverty of any kind brings its own risks that in my view far out way the risks from machinery or animals found in an agricultural environment which can be managed in a thoughtful considered way.

I hope this document demonstrates the level of thoughtful considered practice in place long before this review. Highlighted and made clear by this review.

David Bartlett MBE
Managing Director
September 2025

