

# Tacking-Up & Riding

## Tacking Up

Horses have an inventory (GUI) for equipping tack and viewing their current needs and skills. Access a horse's inventory by shift + right-clicking the horse - ideally with an empty hand as some items have a shift + right click functionality.

The slots allow riders to equip a [Halter](#) or [Bridle](#), [Blanket](#), [Saddle](#), [Girth Strap](#), [Breast Collar](#), [Leg Wraps](#), [Horse Armor](#) or [Pasture Blanket](#), and [Saddlebag](#). Some of these items are required to ride the horse:

- Without a bridle and saddle a rider will not be able to steer (control) the horse
- Without a girth both rider and saddle will fall off the horse within a few seconds

Much like in real life, tack needs to be equipped in a logical order; bridle first, blanket, saddle then girth. Breastcollar and wraps are optional. If the horse is already wearing one of these item types, you can 'hotswap' it out with another version by shift + right-clicking the horse with that item in hand without having to open the GUI.

A horse's inventory cannot be accessed while they are sleeping. Right-click with a bridle in hand (or shift + right-click if they are wearing a halter) to equip it; this will wake the horse up if you need to interact with them overnight.

Tack dependencies (such as saddles requiring blankets) are a configurable value and can be adjusted in the [server config](#).



**Shown:** A Horse wearing adventure tack and a saddlebag.

## Riding

Right-click a tacked horse to mount it. If properly equipped, you can steer the horse with the standard directional controls (WASD) and mouse, jump with spacebar or dismount by pressing shift.

Horses have a gaits which are patterns of movement that occur at different speeds and rhythms. In SWEM, horses have 5 different gaits; walk, trot, canter, extended canter and gallop. On first mounting the horse, they will always start at a walk. To increase the gait, press H. To decrease once more, press G. Each use will change the current gait by one level up, or one level down.

The gait will reset to Walk when a rider no longer moves the horse forward (pressing W) or following a refusal.

Gait	Speed	Universal	Notes
Walk	3bps	Yes	A horse that is starving or in exsiccosis can only walk.
Trot	5bps	Yes	---
Canter	11bps	Yes	A horse that is malnourished or dehydrated can only go up to a canter.

Extended Canter	13-17bps	No	A horse that is malnourished or dehydrated (or worse) cannot ext. canter.
Gallop	13-27bps	No	Gallop can be used for a set amount of time, dependent on speed level. It has a cooldown after use, during which time the horse cannot gallop.
Swimming	N/A	Yes	Horses will swim when the water depth is greater than 1 Block <ul style="list-style-type: none"><li>• Will swim even if dismounted - can be remounted</li><li>• Will not change gaits - speed level has no bearing on swimming</li><li>• Will not take drowning damage if submersed underwater</li><li>• Will require a 1 block step up out of the water</li></ul>

Universal speed refers to a gait that is unaffected by the speed level. This is implemented to allow players to ride together (trails, team sports) on servers regardless of their horse's skills.



Dual Riding

Two players can ride a horse if the horse settings are set to all or trusted, which requires the player to be set as trusted via commands. When the primary rider dismounts, the secondary rider will take control of the horse.

Carrying Entities

Ctrl + Right Click is the default keybind, if you set a different key for sprinting you would use [sprint key] + right click.

A player can place a **single** passive entity, such as livestock or villagers, on the back of their horse. To place an entity on a horse, the rider must be mounted and looking at the entity - press (default) Ctrl + Right-click to mount the animal on the back of a horse. To dismount an entity from your horse, stand on the ground, hold Ctrl + Right-click the horse (remount) which will remove the entity. Alternatively, use a lead on the mounted entity to remove them. You can safely mount and dismount normally without ejecting the carried entity.

Frost & Lava Walk

Lag and chunkloading can delay ice/magma spreading and drop the horse into water/lava. **Moving slower may help.**

Horses can safely be ridden across water and even lava if wearing [horse armor](#) of a **specific tier or higher**. For Frost Walker, gold tier horse armor must be used, which creates a layer of ice underneath them at the same y-level they were on if water is present. For Lava Walk, diamond tier horse armor must be used, which creates a layer of magma underneath them at the same y-level they were on if lava is present. Horses wearing diamond tier armor will take no damage from lava even if submerged, and the armor does not deteriorate in condition.

Flight (1.20.1-1.3.0+)

Flight is not steered by mouse direction as with normal riding, the player will need to carefully give WASD commands.

Flight requires a horse to be equipped with [Amethyst-tier armor](#) - this includes the special variant armors (anything with wings). To initiate flight, mount an armored horse and press **J** to toggle flight.

Flight Controls (Default)

Flight is simpler than it might seem, however different combinations of keys or different movement can result in different flight actions. These display to the right of the hotbar, telling the rider what action and animation the horse is currently doing.

Key	Action	Description
J	Launching	Toggles flight by launching the horse 7B into the air.
	Glide	<b>Default</b> state without any key commands - slowly flies forward and decreases altitude (height).
W	Accelerate	Increases the speed (up to max) - remains at the same altitude.

<b>A</b>	Bank Left	Rotates the horse in a gradual left turn - decreases altitude <b>unless</b> moving forward (holding W).
<b>D</b>	Bank Right	Rotates the horse in a gradual right turn - decreases altitude <b>unless</b> moving forward (holding W).
<b>Space</b>	Elevate	Increases the altitude without moving forward.
<b>Space</b>	Rise	Increases the altitude while moving forward (holding W).
<b>L Shift</b>	Flutter	Decreases the altitude without moving forward <b>if</b> not using W. Shift + S to slow to a flutter.
<b>L Shift</b>	Dive	Decreases the altitude rapidly while moving forward (holding W).
<b>S</b>	Float	Decreases the speed to a stop - remains floating (hover) at the same altitude.
	Landing	The horse will land when they touch a block - this includes on collision with blocks (terrain).

### Simple Summary:

**J** to start flying, **W** to move forward, **A/D** to move left and right, **Shift** to decrease height, **Space** to increase height. It's similar to creative flying but without the mouse movement to steer.

## Leading

Horses can be led using a lead, or [lead and anchor](#). The leading mechanics are the same as Minecraft - SWEM plans to overhaul leadrope options and leading AI in future.

### Cross Ties

Horses can be cross tied between two hitching posts, fences or ring hitches. Attach the horse to one connection as normal, take a second lead and use on the horse. Connect to the second hitching point and the horse will be pulled into a somewhat central position between both connections. On right clicking either connection, both leads will be disconnected and dropped at the horse's feet.

Horses cannot be lunged - this feature was planned in future. Any marketing or RRP videos appearing to demonstrate feature this will generally have used a horse with unrendered tack and an invisible rider (multiplayer server).

# Gallery



**Shown:** A Horse wearing adventure tack and a saddlebag.

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## Known Issues

If you find an issue, please report it to our bugs channel on [Discord](#). We ask that you look to see if your issue was reported first!

- **[~] 1.18** Horses sink in lava (if magma walk lags), but will not die in diamond+ armor.
  - **[~] 1.20** Flight has some animation oddities with the player sometimes clipping inside the horse.
  - **[~] 1.18** Horses get stuck swimming - cannot be led or lifted out. Remove water with sponge to break the animation.
  - **[~]** Horses do not reset to walking and will steps up a gait when next changed (ie start at canter > move to gallop).
  - **[~]** Second rider mounting and unmounting horse slows the current gait to a walk.
  - **[~]** Horses bucking with a mounted entity will damage and potentially kill them.
  - **[~]** Mounted entities occasionally get stuck on the back of a horse and cannot be dismounted.
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## Changelog

## View Changes

This is not a complete list of version changes / fixes. It is a changelog of relevant wiki-related version information.

MC Version	Release	Notes
1.20.1	1.20.1-1.4.0	Initial flight toggle launches 7B into the air, instead of previous 11B.
		<b>[Bug Fix]</b> Speedy reversing (back up) no longer occurs when pressing S.
		<b>[Bug Fix]</b> Cannot dismount mid-air in flight as either primary or second rider.
	1.20.1-1.3.2	<b>[Bug Fix]</b> Gait changes cannot be used in flight - no in-air refusal animations.
	1.20.1-1.3.0	Flight implemented.
		Horses swim in Lava and will not take damage if wearing Diamond+ armor.
1.18.2	1.18.2-1.3.0-15	Horses can no suffocate in blocks to prevent ice suffocation during lag spikes.
	1.18.2-1.3.0	<b>[Bug Fix]</b> Cross ties render both leads.

## Other Information

Continue reading this chapter to learn more about our Horses!

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