

## **ANTI-CAMPING SYSTEM (MECHANIC) - RESEARCH**

Anti-camping systems aren't necessarily one mechanic but rather the sum of multiple different systems working together. Different mechanics and systems in the game that are used for one purpose can also be used for deterring campers, ranging from the weaponry that is available, map design to game modes. Even something as simple as footstep sounds can help reduce camping as enemies can be heard lurking behind a corner as they shift slightly in their position, creating footstep sounds.

Overall camp prevention is best done by the design of maps and game modes. If the maps provide good spots for camping (good cover from many directions for example), people will try to utilize this advantage. Game modes that promote sticking as a team or playing around objectives that are located in areas with multiple entrances/exits are a good way to discourage camping in random places of the map. One good way for preventing camping is multiple entrances/exits to most or all parts of the map and not just the objectives. If one part is occupied by a camper, the players can choose an alternative path to their destination or try to surprise the camper from another direction. If the maps have corridor-type of environments with just one entrance and exit, these areas should be limited in hiding spots and camping can be prevented by using verticality. Different types of weaponry can also be used to reveal/kill the camper or force them to leave the spot, such as grenades, radars or airstrikes.

It is a good idea to reduce clutter in the map so people have fewer places to hide well. Camping spots will appear in playtesting and it is important to keep track of these types of places so they can be modified to offer less cover and add more entrances or vantage points to the spots. This is not a mechanic by itself but still good to think about when creating levels or maps.

There are three main types of camping that are listed below with some examples from various games that have systems in place to counteract these types of camping. It is important to have a distinction between these types as they can be counteracted by different means. Spawn camping is the type that ruins the camped player's experience the easiest so it is important to have systems in place that help counteract it. Objective camping is natural for games that are based around objectives and it is a key element in making these game modes exciting as they force the attacking players to develop different types of strategies. Location camping is mostly dealt with by communicating with teammates, so it is important to have tools for it available, be it in-game commands of text/voice chat.

### **Objective camping:**

There are no big problems with this type of camping, because most of the time objectives have multiple paths for entering the area and players have different kinds of tools to force the camping enemies out of their hiding spots (e.g. grenades). To defend an objective, the best thing to do is staying in the area and engaging enemies that approach it, so camping prevention in these areas is not possible or even necessary. Players naturally will attempt multiple different strategies and entry points to capture/contest the objectives and it is the main focus of the gameplay. Both sides get to hold and attack the key points of the map (Counter-Strike). Objective camping can also be countered with the use of vehicles or airstrikes (Battlefield).

### **Spawn camping:**

Games where players continue to spawn during the match are prone to spawn camping. Some games bypass this issue by having no respawns in rounds (Counter-Strike competitive), but some games struggle with this problem (Star Wars Battlefront). Spawn camping can be discouraged by making the game more objective focused instead of kill focused. If the goal is to get as many kills as possible, the games, if unbalanced, can snowball into one team constantly killing the other as they spawn with no room for retaliation from the spawn camped team. If the game is focused around objectives however, the game naturally centers around these areas of the map, leaving the spawns less prone to being camped. If however this still happens this can be further discouraged by having multiple exits from the spawn, so

players can actively choose to bypass the camping players and go for the objective, or flank them from the side of behind and deal with them (Overwatch).

#### **Location camping (random location on the map):**

Usually fixes itself in most cases as players start to learn where the players are camping in and can then use different approaches in dealing with them. The camper is always at a disadvantage here if the map/game mode is objective based, as they contribute nothing to the objectives themselves. Multiple games try to discourage this by giving more points/value to kills near or at an objective, making camping for kills less rewarding outside of them (Battlefield). Team communication can also be used against campers, whether it is via in-game commands or voice chat. This is one of the most effective tools against camping, but unfortunately a lot of players in games do not utilize these features. It is important to have in-game commands for a camper and their location available specifically, so other team members can help deal with them. Another way of possible communication is pinging/spotting (Battlefield). The player who sees an enemy can spot them and their location is revealed to the rest of the team on the map or mini-map. This can help others then flank the camper in various ways.

#### **Anti-camp systems per game:**

Battlefield has large maps with multiple different places that accommodate camping. It is deterred by encouraging playing around objectives as well as objective kills by giving extra points, the spotting mechanic that reveals them on the map and verticality in maps. Hills and buildings provide cover from snipers and campers have to search for a good vantage point which can be already well-known by the other team. Varied environment objects and also help hide people on the other team who can spot and take out campers themselves. Big maps with many buildings and other environmental objects can promote camping as it is easy to hide behind corners or inside buildings. This is countered by having destructible objects in modern Battlefield, so if someone is camping in a building, the other team can take the whole thing down. Battlefield 2 has the commander mode where one player can see the entire map and order surveillance and spot enemy campers and take them down with airstrikes. This system was quite innovative and fun and helped deal with campers.

Counter-Strike has much smaller maps but also help deter campers by having objectives the players try to go for. However, camping around the objectives is an effective strategy and is utilized by many players. However, all the key points have multiple entrances and while it's easy for the defending team to camp and cover all the entrances, the attacking players can help defuse the situation by using grenades and communication. Smoke grenades provide cover, flashbangs give an element of surprise, molotovs deny areas and force enemies out of cover and explosive grenades force enemies out of cover or deal high damage to camping players. In deathmatch mode with random, constant spawns there is a grace period where the player cannot be killed until they do an action. This helps against being killed the second people spawn and give them time to react to possible campers. For example if there is someone camping a spawn, the player spawning in can stand still and wait for someone else to come and engage the camper before making an action.

H1Z1's battle royale also utilizes grenades for chasing campers out of their hiding places, but it also has the toxic gas that closes in on the map, forcing players to stay moving and making camping one spot much more difficult. However, the gas does not spread fast enough and some areas are left alone for long periods of time, so camping still happens quite a bit in the game. Also, it is extremely rewarding and has little to no risk because most buildings only have one entrance or vantage point per room, making it hard to detect campers before they have already engaged you. The third person camera helps to look behind corners but there are many spots in the buildings where players can hide even from the camera.

Overwatch has no inherent mechanics for fighting campers and it is more up to the player to counter them. This is done by changing to a hero that deals well with campers or flankers. The biggest problem in Overwatch when it comes to camping is spawn camping, which can happen if the game is very one-sided

and it can lead to a poor game experience. However, this is counteracted by having multiple exits from the spawn point and having an impassable wall so that the enemies cannot enter the other team's spawn. The spawn location also constantly heals the players in it so they cannot be killed inside it. In 3v3 mode, all players are revealed to everyone near the end of the round, so if someone is camping, everyone will know where.

### **Conclusions:**

Most of the listed games have managed to find a way to counteract campers quite well, with the exception of H1Z1, where the reward for camping is too high compared to the risks. This game could do with some revision when it comes to campers as it is hard to detect the players and even harder to react to them. Battlefield struggled with camping in their earlier releases but it has been a better experience in the later titles, where spawn camping became harder and destructible environments made close quarters camping more difficult. Overwatch and Counter-Strike's game modes and maps make camping difficult because there is little clutter and there are limited places that offer good cover that makes camping possible. The competitive modes' objective focus also punishes players who stay away from the key areas to look for easy kills. There is an emphasis on audio in these games, which makes people lurking behind corners easier to detect by the noise they make.

In closing, the systems and mechanics for discouraging and counteracting camping depends on the type of game, because different types of maps and game modes open opportunities for different types of camping. It is important to balance the risk and reward for camping where the risk is high and the reward is mediocre. The best way to reduce camping is having the campers realize that it is not worth it. It is important to detect possible types of camping that could run rampant early on in the design process, so systems can be put in place to counteract them. However, in early playtesting it is still possible to make adjustments and changes if a form of camping is more prevalent than intended.