The same weapons from Heart of Chornobyl, but now better, more lethal and realistic against the Zone’s faunas. Say no to tanky mutants with this mod - just don’t forget what Gaffer told you about fellow stalkers in the Zone…

**Idea**

Stalker 2’s vanilla gunplay is, in my opinion, pretty bad – the core weapon system is good and allows a vastly more detailed weapon simulation compared to what was available in the original trios, yet what we saw at launch was at best underwhelming, and at worst, or what I’d always like to call – a literal travesty.

Hence - the creation of this mod. My aim is to not only fix baseline stats such as weapon damage and penetration, but also revamp other aspects of the weapon system in order to deliver a *vastly improved gunplay experience*, compared to what’s present in vanilla Stalker 2.

I hope you enjoy playing Stalker 2 with this mod as much as I do - any suggestions, bug reports, or constructive criticism are greatly appreciated, and your feedback will help make this mod better for everyone.

**Features**

**Complete overhaul of weapon ballistics:**  
•    Each ammo type now feels properly distinct from each other - intermediate cartridges now delivers more damage and penetration compared to pistol rounds, full-power cartridges like 7.62x54mmR now hits as hard as they should, and everything in between feels just right.

•    Full emulation of damage and armor piercing fall off up to 500m – no longer will weapons have an arbitrary damage dropoff beyond 25m!  
•    In-game weapons now feature authentic muzzle velocities and bullet drop. As a result, sniper rifles now shoot fast and flat, intermediate cartridges maintain effectiveness at distance, and pistol rounds are realistically slow at range.   
•    Shotguns have been rebalanced and now are more effective beyond point-blank: slugs will reach out to medium distances, while buckshots stay reasonably effective instead of turning into airsoft after 10 meters.  
  
**Major improvements to individual weapons:**

•  Reworked handling for most weapon types in game: pistols will now have actual muzzle flip compared to vanilla, SMGs stand out with lower recoil kick and fast ADS speed compared to rifles, and assault rifles now have their characteristic recoil patterns for each type in game.   
•    New fire rate values for all automatic weapons - now each weapon platform acts distinctly in full-auto fire, offering a more diversified experience.  
•    Magazine capacities now match their real-world counterparts: everything from tiny PM magazines to drum-fed LMGs hold the right amount of rounds, and extended magazine upgrades provide realistic alternatives - like the 60-round PMAG for AR-15 based rifles, or genuine high-capacity options for your favourite SMGs.  
•    Unique weapons are now properly special, and as such each unique variant has meaningful improvements over their base models. For example, Trapper’s Predator will have superior damage and penetration, and Faust’s USP now have less recoil than the default version.   
•    New fire modes for specific weapons: APB and MAC-10 (M10 Gordon) can now fire in full-auto in addition to semi-auto, just as intended by their original designers.  
•    And of course, the mighty PKM (RPM-74) now use proper 7.62x54mmR - bringing all the firepower that you'd expect from a GPMG. Go forth and deliver destruction!  
  
**Greatly enhanced enemy manpower:**  
•    Enemy NPCs now use weapons with increased lethality, featuring improved damage/penetration, range and accuracy values, for a more deadly combat experience. Tread lightly, beware of enemy ambushes and made every move count, for every single one could be your last in the Zone…

•  NPC damage changes will also applies to your allies’ weapons too – just saying, but it’s not my fault if you lose to other stalkers in a bet now, get good!

**And various other tweaks:**

**•** Tweaked barter pricing for certain weapons in-game: an OTs-02 Kiparis should no longer be exponentially more expensive than an MP5.

•   Nerfed ammo pickup from NPC's assault rifles, from 1 - 10 rounds to 1 - 5.

**•** Modified body hitbox damage multiplier to better suit the new weapon stats.

***The Zone is now more unforgiving than ever. Stay alert, plan your moves, and remember – every shot counts.***

**Installation:**

Open the “1 - Main installation” folder, and extract the "Stalker2" folder into the main Stalker 2 installation, and where the Stalker2.exe executable is.

**Compatibility**  
This mod directly edits weapon/ammunition config files, and as such any similar mod that aims to change such stats will be incompatible. For mods not listed below, I highly recommend using tools available on Nexus to check for conflicts and merge changes as needed, due to the high chance of file conflicts that can happen with other mods.

A list of mods compatible *and recommended* alongside Better Ballistics:

- Modular Hard Mode: Hardcore total conversion mod for Stalker 2, recommended to install alongside BB for the best hardcore experience.

+ **Regarding compatibility with Modular Hard Mode**:

* Remove BetterBallistics\_CoreVariableTweaks\_99\_P.pak and BetterBallistics\_BodyHitboxTweaks\_99\_P.pak in your modlist, if you have this overhaul installed.
* No conflict checking, load order adjustment or merging is required: Better Ballistics already has a built-in patch for MHM.

- Maklane's Better Gunfights: Adjustes dispersion parameters of NPC bullets at long and medium distances, soft requirement for BB. NOT COMPATIBLE with Modular Hard Mode

- Oxide’s eXpanded Armory: Adds additional tacticool gear to your loadout, including: Night vision goggles, an overhauled repair system, universal scope compatibility, interchangeable muzzles, grips and laser sights.

- Linxz's NPC Attachments: Adds weapon attachments to NPCs, highly recommended alongside OXA.

- Any weapon texture mod: Should work fine.

DO NOT INSTALL the following mods:

- Other weapon ballistics mods: Sorry, you can only choose one to use here.

- Mods that increase reload speed/ADS: Better Ballistics already has its own ADS speed implementation, making such mods redundant.

**Modded config files** *Better Ballistics is built in a semi-modular fashion,* using multiple .pak files making it possible to choose what to be included, or removed in case of conflicts. All the .pak files used in this mod include:- BetterBallistics\_Main\_97\_P.pak: The primary .pak file, responsible for most of the weapon changes in this mod. Modifies  the following files:

* AmmoPrototypes.cfg
* AttachPrototypes.cfg
* PlayerWeaponSettingsPrototypes.cfg
* ProjectilePrototypes.cfg
* WeaponGeneralSetupPrototypes.cfg
* WeaponPrototypes.cfg

- BetterBallistics\_BotWeap\_99\_P.pak includes new weapon stats for friendly and hostile NPCs in game, and modifies:

* NPCWeaponSettingsPrototypes.cfg

- BetterBallistics\_BodyHitboxTweaks\_99\_P modifies body damage multiplier, and contains the following:

* GeneralNPCObjPrototypes.cfg

- BetterBallistics\_CoreVariables\_99\_P modifies body damage multiplier, and contains the following:

* CoreVariables.cfg

**Notes**

* *For the best experience, it’s best that you install other mods that balance out GSC’s default NPC accuracy values – Better Ballistics shouldn’t conflict with any such mods, and the new weapon stats provided by this mod will be unbalanced against GSC's bot configs.*
* A rough Excel chart for every base ammunition type's damage and penetration is provided in the Files tab.

**Credits:**

- GSC Games World: for working tirelessly on S.T.A.L.K.E.R. 2 in spite of all the odds

- Andrew Spearin, Fontaine: for being the main inspirations behind this mod

- Furo Cindras, Silent Assassin2, and many other awesome people on the GAMMA Discord server: for pioneering on S.T.A.L.K.E.R. 2 weapon modding as well as giving constructive feedbacks on weapon balancing

- Oxide: for the assistance on Stalker 2 modding, and getting refurl loading method to work with this mod

- inf\_solov: for the data on weapon ballistics regarding the ammo types present in this game

- Ani\_HVX: for tolerating my attempt on butchering Modular Hard Mode's damage model :P

- whynexusmodswhy1231, for giving the permission to merge his mod – Proper Realistic Magazine Capacities, into Better Ballistics