

# Wolfgirl

Deflationary NFT-based token, with automated monetary rewards and crash prevention mechanisms that aims to provide both utility and profit for users.

4 December 2021 (v1.1)

## **Abstract**

DeFi is poised to revolutionize the financial markets by cutting out the costs for intermediaries such as banks or legal departments, and offering new and compelling ways to earn interest in digital assets, or gain easy and straightforward access to credit. Most DeFi tokens have now adopted a deflationary stance, either by including a burn mechanism for each transaction, or by providing ways to spend their tokens that permanently remove them from circulation. Unfortunately, this deflationary nature rarely translates to price growth as it should.

Furthermore, a large portion of DeFi tokens have either limited or no utility at all: they are only driven by speculation and very limited interest rates in the form of reflections. Initially limited to the same token, these reflections now can also take the form of other tokens or even native chain token rewards. Still, there is no reason for the common man to buy those tokens, aside from pure speculation.

In this paper we present Wolfgirl, a hyper-deflationary token that aims not only to provide monetary rewards to holders, but also to achieve real utility with AI-generated NFT collections and an NFT Marketplace, as well as making sure that the deflationary nature of the token translates into long-term valuation via an innovative price floor mechanism to maintain robust growth of the token.

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## 1. Introduction

DeFi tokens (Decentralized Finance Tokens) are financial applications that run on blockchains and mirror concepts that have been successfully utilized in traditional banking and finance. The key idea is to recreate financial services in a decentralized manner without a third party, such as a bank, intervening. Instead, trust is placed in written code (smart contract) that is deployed on a blockchain network and allows interest to be earned, loans to be obtained or (synthetic) assets to be traded, and more, all without relying on a third party.

If holders of a typical DeFi token want to earn high interest on staking or yield platforms, they typically have to expose themselves to several risks, such as loss of control over holdings, insecure or badly written smart contracts, and extremely volatile market conditions, coupled with an immature token economy whose value is only supported by its own underlying token and its experimental utility. In most cases, the applied monetary policy does not allow for sustainability or longevity of these projects, creating a bubble that will inevitably implode due to its corrupt and inflexible nature.

In addition, the associated gas costs and the numerous transactions and interactions that end users must initiate along the way make this system error-prone and expensive. These inefficiencies ensure that the general public cannot be effectively reached due to low accessibility, high financial risks, and general fear factors (e.g., crypto project fraud rates, unregulated markets).

The introduction of frictionless revenue generation has opened up DeFi to a wider audience, as it simplifies most user interactions via automated logic and rewards holders by passing a small portion of the protocol tax to all holders of the token, while another tax portion seeks to preserve token value via deflationary measures such as token burning.

But the problems that remain are the overall profitability and fair distribution of rewards, the insufficiently maintained sustainability and stability of the protocol's ecosystem (implosion and monopolization) and the lack of an advanced and well-executed marketing strategy aimed at achieving mass adoption through high, fast, and low-cost accessibility of the project.

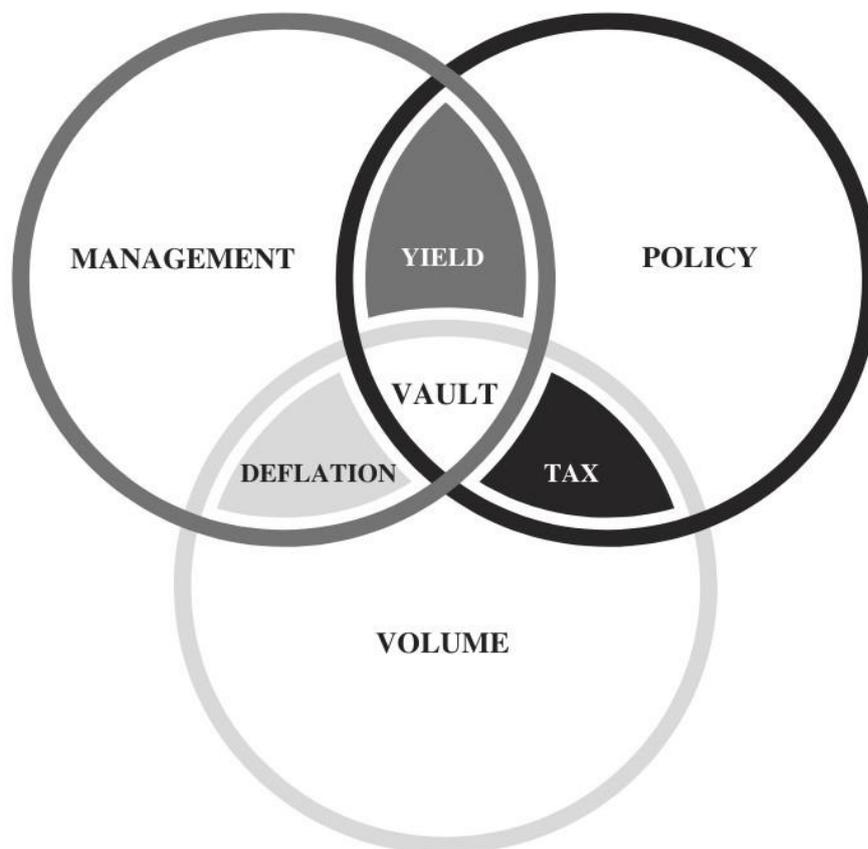
Wolfgirl proposes a solution that combines the benefits of perpetual, easily accessible and profitable rewards for all by means of a smart and complex monetary solution that allows the protocol to stay healthy in all market conditions. In addition, we have established a very distinct artwork line for brand recognition, and a strong core community that is involved in every step of the project. Supporting many investment strategies, Wolfgirl is a credible financial tool for holders, traders, and NFT enthusiasts alike and can be used, for example, as a hedge or even for simple speculation for short, medium, and long-term strategies, be it via holding or through NFT purchases.

## 2. Architectural Overview

Wolfgirl's core functional goal is to maintain a healthy valuation through its tax rate, deflation rate and price floor mechanism that protects its ecosystem from currency implosion while generating non-native returns (BNB) within its own reserve vault for native token holders. Below, we describe the architecture of each component of Wolfgirl.

Wolfgirl will initially be built on the Binance Smart Chain, but we intend to integrate it with all leading smart contract networks that support an underlying reserve asset in the future.

The logic of the protocol is based on three fundamental pillars: Management, Policy, and Volume. Their interactions with each other are critical to the underlying functions and their value, feeding the vaults at the core of the economic model and using their applied functions: Yield, Tax, and Deflation.



## 2.1 Management (Vault)

Allows the community to:

- Manage the aggregation of the reserve asset (BNB) for the Den.
- Claim rewards generated within the Den.
- Empty the Den when conditions are met, triggering a buy of the native token and subsequently a burn of those bought tokens.

## 2.2 Policy (Monetary)

Will allow the protocol to:

- Ensure flexibility, stability, and execution of vital functionalities.
- Maintain constant yield generation within the Den.
- Maintain the tax/burn system to ensure deflation of native supply and inflation of reserve assets within the Den.
- Maintain ever-rising value via the price floor mechanism.

## 2.3 Volume

Allows the ecosystem to ensure:

- Buys and sells contribute to overall yield generation. Higher volume drives an increase in the Den, accelerated deflation, native token price appreciation, greater yield, and more frequent collectable rewards for holders.
- Acceleration of the protocol value and of the unsold NFTs value.
- Tax collection and deflation of supply.

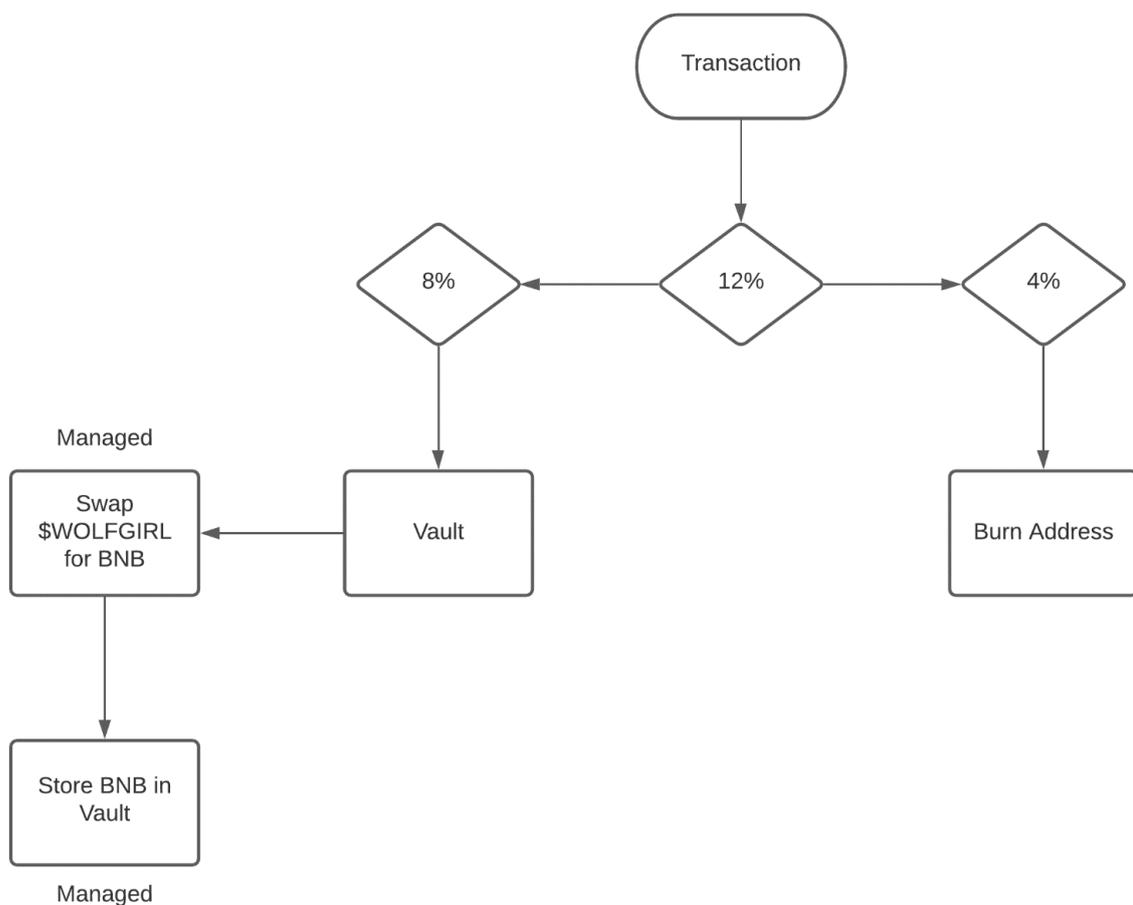
### 3. General Overview of Tax and Rewards Systems

The Wolfgirl protocol is designed to prevent price crashes and ensure proper valuation through the deflation of supply via the price floor mechanism. At the same time, it builds up a protocol backing reserve (Den) containing BNB, which acts as a price anchor and makes itself available as a sophisticated reward system for holders of the native \$WOLFGRL token.

#### 3.1 Tax System

The monetary policy of the protocol uses a total tax of 12% on each transaction (sales, purchases, transfers). A portion of the protocol tax (8% per transaction) is used to replenish the vault with \$WOLFGRL tokens. Once 0.01% of the initial supply of \$WOLFGRL is stored in it, anyone can call a function in the main contract to trigger a sell of the \$WOLFGRL inside the vault, which will then store the BNB it received instead.

Tax Flowchart



## 3.2 Rewards Functions

A protocol cycle is controlled by two distinct and rewarding functions (Vault Management, Vault Reset) that can be called by anyone once certain parameters are met. An additional function ensures recurring BNB rewards for \$WLFGRl holders (Base Reward).

### Vault Management

If the temporary vault (collecting \$WLFGRl through tax) has grown bigger than 0.01% of the current total supply, the VAULT MANAGEMENT function becomes available and can be called by anyone that is connected to the dashboard (Vault progress is visible on the dashboard).

This function triggers the swap of \$WLFGRl for BNB, which is then stored in the Den (Smart Contract). A vault manager receives a minted reward of 1% of the total current temporary vault value in \$WLFGRl.

To prevent abuse of this function, each managing wallet address is added to a list of vault managers. Vault managers on this list will be blocked from calling the VAULT MANAGEMENT function until they are removed from the list due to subsequent vault managers. The list remembers the last 10 addresses that called the VAULT MANAGEMENT function.

### Base Reward

Each time the current total supply of \$WLFGRl has decreased by 0.5%, owners are entitled to a base reward (or Spoils) of BNB from the Den, equal to their current supply in relation to the total supply. The total base reward is 25% of the Den (BNB) aggregated since the previous snapshot. A holder should claim the rewards before the next snapshot takes place (after an additional 0.5% supply is burned), as unclaimed rewards flow back into the Den.

### Example

- A user holds 1% of the total supply (10 million \$WLFGRl at 1 billion supply) when the Base Reward becomes available.
- If the Den has totaled \$1 million worth of BNB since the last 0.5% deflation, a total of \$250,000 (25%) worth of BNB will become claimable for holders.
- The user holding 1% of the total supply will be eligible to receive 1% of the \$250,000 worth of BNB from the Gravity Vault Base Reward (\$2,500)

### Vault Reset

If no new Spoils are available for more than 30 days, the protocol assumes that the token is in a stasis state, and will make the VAULT RESET function available to anyone. This function makes the Den swap all of its remaining BNB for \$WLFGRl, then immediately burn all of the \$WLFGRl tokens it has, which will dynamize the token or provide a good opportunity for holders to exit their position, depending on market conditions.

## 4. NFT Offering

Wolfgirl aims at offering more than just monetary rewards; which is why the native token will be used to mint on a proprietary ERC721 contract called 'WolfgirlNFT', which will host not only the several collections that the Wolfgirl team plan to launch, but will also be open to anyone who wishes to mint their NFT on our chain.

At launch, an initial collection of 2,500 AI-generated NFTs will be made available, picturing never-before-seen, highly detailed Wolfgirls. These NFTs will be tradable on an upcoming Wolfgirl marketplace & auction Dapp, but they will also be transferrable to any other ERC721 chain, as the WolfgirlNFT contract is compliant with all industry standards, including the ability to burn your own NFTs when you transfer them over to a new ERC721 contract.

The AI-generated NFTs themselves will have their image and metadata stored on IPFS for future-proofing, with metadata that is 100% compliant with OpenSea standards to ensure they maintain their value no matter where they are bought or sold. We have also included in our native ERC721 implementation a way for users to update the metadata of their own NFT, in preparation for future implementations of our Dapp to have a gaming component, as well as tangible NFT sections that will be retroactively compatible with all of the NFTs minted on the WolfgirlNFT contract.

We are also preparing to have dedicated artist offerings of handmade NFTs upon the unveiling of our marketplace, and we are already closely collaborating with some of these artists for the various assets used on the Wolfgirl website and for marketing materials.

## 5. Price Floor Mechanism

As previously stated in our abstract, most DeFi tokens have either no plausible method, or only severely restricted methods, to reflect the deflationary nature of their token into an actual valuation increase on the open market. Wolfgirl aims to correct this with the help of its price floor mechanism.

The basis of this mechanism is to discourage any sell action that would drive the price on Pancakeswap lower than the current price floor present in the contract. We make use of Pancakeswap's various functions to estimate the price action and determine algorithmically if a sell would break this floor. If the sell happens below floor or break it, then the tax on this sale is doubled (24% total).

At launch, the price floor will be set to the launch price (which will also correspond to the presale price). Afterwards, the team will adjust upward or downward the price floor to accommodate to the valuation of \$WLFGRRL.

The new price floor will be calculated as follows:

$$\text{NewPriceFloor} = \text{OldPriceFloor} + ((\text{NewPrice} - \text{OldPrice}) / 10)$$

Example 1:

- The current price is 1BNB for 1 million \$WLFGRRL, the actual price floor in the contract is 0.5BNB for 1 million \$WLFGRRL.
- A user buys tokens on Pancakeswap, making the new price 1.1BNB for 1 million \$WLFGRRL.
- The price floor stays at 0.5BNB for 1 million \$WLFGRRL, and the buy is taxed 12%, no matter what.

Example 2:

- The current price is 0.7BNB for 1 million \$WLFGRRL, while the actual price floor in the contract is 0.65BNB for 1 million \$WLFGRRL.
- A user sell their holdings of \$WLFGRRL, that action would take the price to 0.68BNB for 1 million \$WLFGRRL. This sell is taxed 12%
- Another user wants to sell a portion of their tokens, and this sale would make the new price 0.6BNB for 1 million \$WLFGRRL. This sell is taxed 24%, as every sell after this one as long as the price remain below the floor.

This mechanism ensures that the burned supply actually serves to drive the token's valuation up in the long term, by steadily increasing the floor price over time.

## 6. Legal disclaimer and Risk Caution

Participating in an IDO is a high-risk activity. This IDO is intended only for experienced professionals who are familiar with blockchain technology, cryptocurrency trading and trading in other marketing tools. By participating in this IDO, the Buyer is aware of and accepts the risks related to security, possible failure to achieve technical and economic results, and total or partial loss of their capital. Finally, the Buyer declares to be aware of the legal uncertainty of this type of transaction and to have carried out their own legal consultation in accordance with the applicable law to which they are subject. The token does not in fact grant any financial (income, capital or dividend) or voting rights in the project. The Token is a crypto asset issued by the Decentralized Autonomous Platform (Project) through the IDO and used by Wolfgirl team members and the community. No other rights are transferred to the IDO. More specifically, the only obligation of the Project is to distribute the Wolfgirl token under the conditions defined in the official publications.

### Sales restriction

Due to national legislation, participants from the following countries are not allowed to participate in the IDO: "U.S. person" (according to this definition), Canada, South Korea, Burma, Ivory Coast, Cuba, Democratic Republic of Congo, Iran, Iraq, Liberia, North Korea, Sudan, Syria, Zimbabwe, Singapore and China. This prohibition applies to all types of persons (moral, physical, agents, etc.) and to any indirect participation (through an agent, registered loan, limited liability companies, etc.) By participating in the IDO, the buyer agrees to the legal disclaimer and to collectively respect the above provisions.

### Warnings

IDOs are high risk operations due to their experimental nature. By participating in this operation, participants declare that they understand and assume the following risks:

- Lack of regulation: the buyer agrees not to take advantage of any guarantees associated with IPOs in regulated financial markets or other regulated financial investments
- Capital loss: the buyer accepts the risk of full or partial capital loss in cryptocurrency or in the token.

In addition, the market, or markets in which the token is traded do not offer the same guarantees that generally apply to traditional financial markets.