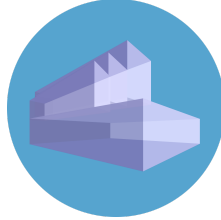# sire

Currency that "works" for you

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https://sireli.cc
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## Abstract

In this paper, we discuss sire an ERC20[1] token specifically designed as a speculative investment asset backed by the value of Ethereum. The sire smart contract introduces three new tradable assets. Two ERC20 tokens known as: sire[2] and relic[3], and an abstract asset known as Mint[4]. The sire smart contract has has several functions: a create Mint function that enables you to mint a specified amount of relic per block based on the amount of sire you lock within the Mint. A typical burn function which allows you to permanently destroy any amount of sire for an immediate boost of relic. The sire "Mint" assets become a tradable asset once created. Mints join both sire and relic and become a speculative investment asset with a relationship dependent on a large number of factors: Ether collected and locked in the contract, current fiat value of Ether, maximum sire circulating, maximum relic circulating, and the number of Mints being held simultaneously. sire, relic, and Mints will play a pivotal role in a larger investing ecosystem that enables users the ability to easily invest in traditional investment schemes via smart contracts designed to use sire, relic and Mint.

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# 1. Introduction

sire was created to provide users with a speculative investment asset that has both: immediate and long-term ERC20 asset generation that is backed by the second most popular cryptocurrency network in the world: Ethereum. Most currencies and specifically ERC20 tokens being introduced today are specifically designed for one purpose. Most of which are created for a service that you already pay for for with fiat money. The "service" that sire provides to users is a speculative  investment vehicle that is backed entirely by a decentralized currency. relic and sire will permanently be backed by the current market value of Ethereum. Ether exchanged for sire will become locked forever within the sire smart contract. This provides both sire and relic with a permanent backing of value. As long as the Ethereum network exists and contains value sire and relic will continue to have value.

sire was created to "work" for you, it is was made for those who strongly support an ecosystem where Ethereum and various ERC Tokens will continue grow in acceptance and value over time. As the Ethereum blockchain progresses forward block by block, based on the number of sire you own, you can collect a specific amount of relic per block that has elapsed. This is done because sire gives you a function to mint new relic tokens without having to do anything other than lock your money making it unsendable during the minting period. A one time investment into sire and a Mint creation is all that is needed to earn relic tokens forever. sire, relic and Mint will ultimately play a role in a larger ecosystem becoming the base currency for many traditional investment schemes to be added in the future in the form of smart contracts.

sire when being put up during a create Mint, in essence locks the sire within that Mint object. When a Mint is created a few other values are also locked in this object. The rate at which relics are rewarded and the block which the Mint was created is saved. Mints themself can be traded just like the sire and relic tokens these can simply be sent to other addresses. The sire locked in the Mint is ultimately "removed" from the accounts sire balance when creating the Mint. This is only temporary, until your Mint is collected. Collecting a Mint rewards you with the amount of relic you are entitled to generate based on the amount of sire locked in the Mint and how long the Mint was active. In addition after collecting your Mint you will be "given" back the sire you locked and now it is available to be sent to others or used for new Mint creations.

sire can also be "burned" to provide a larger, immediate return of relic. If a sire is burned. The sire token(s) will be destroyed in the process. The burn essentially converts the sire into the current exchange rate of half of a years worth of relic. This is a very enticing function of sire, it gives you a large amount of relic immediately. But in the long haul, it destroys your ability to create new relic with that sire as it is now gone. Benefits do also come from this action as well, since sire has a fixed number of assets every issued the remaining number of sire become worth more in the process as no new sire will ever be issued. Burning sire also makes relic more scarce as they generate them overtime.

The design of the contract has the amount of relic minted per sire steadily down yearly at a predefined rate of 15%. That means that each year the amount of relic a single sire can generate will decrease by 15%. This helps control the number of relic being generated helping them appreciate in value as it becomes a harder to create them in the future. This also incentivizes people to hold sire minting for longer than a year at a time to avoid a 15% depreciation when they finally collect for their sire.

# 2. sire and relic Tokens

## 2.1 - sire

The maximum sire that will ever exist will be up to but no more than 10,000,000 sire. The exchange rate of Ether for sire is 1 Ether to 100 sire. On top of the regular ERC20 functions, sire has three ancillary functions: Create Mint, Send Mint, and Burn. sire Mint's, once created will enable you to generate relic at: number of sire, and the relic reward rate locked in at the Mint creation. sire Mint's, are a transferable asset just like relic and sire and can be traded and speculated upon as such. sire's Burn function is a standard burn function awarding users with half of a years rewards worth of relic tokens instantly. Due to the fixed number of sire available, these tokens will only become scarce as some are lost due to errors and others burned by users. The overall number over sire will decrease naturally, and the amount of relic they are allowed to mint will also decrease a fixed yearly rate of 15%.

## 2.2 - relic

relic creation is coded to deflate over time, every year the amount of relic generated per sire will decrease by 15%. Making the total number of relic generated by each sire year decrease by 15%. The number of relic in the ecosystem will steadily increase overtime as users Mint and collect them. The amount of relic users can generate does depreciate, ultimately increasing the scarcity in the future. This decay incentivizes users to hold sire for a long period of time, more than one year periods. Because the amount of relic they can generate if held will be 15% greater than that of a new mint of relic. relic overall will be less available than users might think as some might hold for multiple years to get a higher % yield of relic as they become harder to create with sire. All relic minted are not spendable until collected and minting is stopped. The estimated maximum possible number of relics to exist in ~5 years is just under 1 Billion, the actual value should be much less by this point. The total number of relics in circulation will heavily influenced by the number of



Maximum Possible relic existing/time
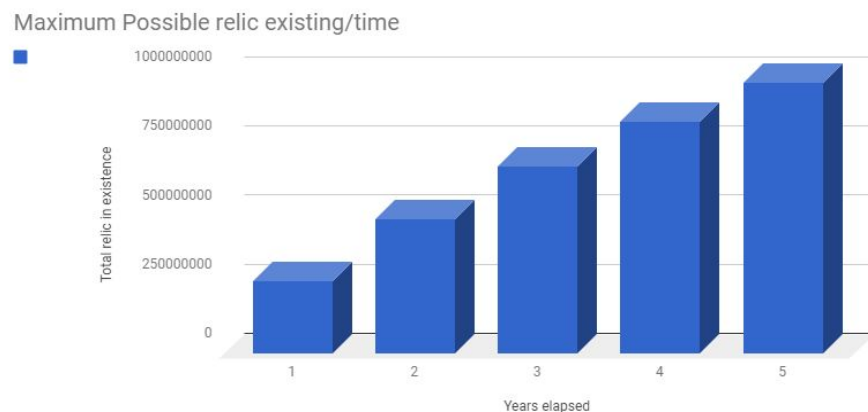
## 2.3 - sire Burn

Users of the network could start to Burn a large number of sire. Causing the amount of relic to rapidly increase and the number of sire to decrease. This would have a short term effect of a large number of relic being in circulation, but as time goes on more than 1/4th of a year, overall less relic will actually be introduced into the system overall. Some users might lock sire for multiple years, causing a temporary shortage on the number of sire available to trade, the number of relic entering the system will also be lessened as a short term side-effect of over burning. The mint function of sire essentially locks the money in question,  sire that is locked and the relic that is being minted are not sendable until the collect function is finally called unlocking the sire.

## 2.4 - Mints and Minting

Minting relic can only be done if a user owns any value of sire greater than zero. A user can then create a Mint object any amount of sire. This will then remove the sire from the users balance and lock it into the Mint that the user controls. The user contains an array of all the Mints they own. Mints can be traded to other addresses and collected by the user who owns it. Since Mints themself lock in both: a relic reward rate and the actual sire ERC20 token, they become a speculative tradable asset. Allowing users to trade sire along with historic relic reward rates in the future. Since rates are set at time of creation this incentivize users to trade Mints and hold Mints for as long as possible as the amount of relic generated by it will be greater than if it wa started in the future at a deflated relic reward rate.
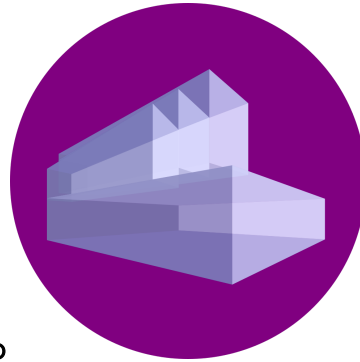
# 3. Rates and Distribution Details

## 3.1 - Details

- **Token Standard:** ERC20
- **Start Date -** Starts **February 15th 2018** extends until Max Ether Cap is hit
- **Ticker Symbol:** sire, relic
- **Exchange Rate -** 1 Ether = 100 sire
- **Maximum Ether Cap -** 100,000 Ether
- **Total possible sire Supply -** 10,000,000 sire
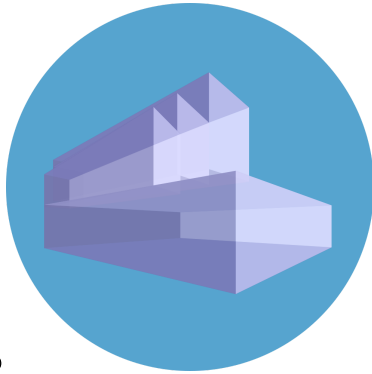
sire logo                    relic logo

## 3.2 - Distribution

Starting February 15th sire will be available to be "created." sire will continue to be created until the contract hits its Maximum Ether Cap. sire will only ever be created up until the Max Cap is hit. After this point they can only be destroyed via the Burning process. A fixed number of sire will exist at maximum of 10,000,000 sire.

sire like most ERC20 tokens will be available for exchange starting on a specific date. The end of the exchange period is based on whether or not the maximum Ether cap is hit. The exchange period will remain until this condition is hit. Unlike most other tokens that use ICOs, almost all of the Ether that is contributed to the sire Contract during the exchange period will be permanently locked within the contract forever. A total of 85% of all of the Ether collected during the exchange period will become locked forever and remain inside the contract. This provides a solid backing for both the value of sire and relic. As Ethereum grows in value so does the entire worth of the sire contract.

After the sire contract has collected Max Ether cap, the sire team will execute a single (one time) withdrawal function, that will reward the team 15% of the total collected Ether by the contract.  The one-time collection of Ether for the team, pays for: the further development of sire contracts and Web-apps, marketing and promotion and server costs.

## 3.3 - relic Deflation

A rate of 15% is hardcoded for deflation of the amount of relic generated per sire. This rate is applied at a roughly each year. Overall your sire will generate 15% less relic each year. Unless you create a Mint and generate this relic over a really long period of time (longer than a year). The date at which you mint relic that rate is set on that day, when you collect your relic that rate is used. This will help us keep the number of relic being added in check, the number of relic being added will increase forever but the amount that will be distributed each year will diminish.

Because of sires Burn function, overtime this will introduce overall less relic than if it was never burned.. Additionally relic being created during a Mint is only accessible when the user collects it. This has an effect on the circulating maximum number of sire and relic both. As incentive is provided for users to keep both locked up and out of "active" circulation.

## 3.4 - Theoretical sire deflation and Burn effect

Since there are a finite amount of sire, their will be a steady loss of sire overtime. A small amount of tokens will be lost each year, estimates put it at around 1% will be destroyed each year due to mistakes with lost wallets or user error.[5] Some amount of sire will become unspendable overtime. This is ok because relic can be created forever, the amount of them being created will be lessened but the ecosystem will be able to maintain.

Because sire has a Burn function, there exists a possibility that a large number of sire could be burned for immediate relic. If this is the case the remaining sire will increase in value and the number of relic in circulation would spike for about a half of a year. After that point, less relic would be generated overall since the burn gives you only ~½ of a year's worth of relic immediately. After half of a year has elapsed the abundance of relic generated by the burned sire becomes offset and the total number of relic introduced into the system by that one burnt sire is less overall. As burned sire can not create anymore relic after this point.

# 4. sire Roadmap

## 4.1 - Phase One (Mid-February 2018 - Late July 2018)

- Deploy sire to Ethereum Main Network (February 15th)
- Ether can be Exchanged for sire
- relic minting becomes possible for sire investors
- Deploy sire core web-server and share git repo
- Promote information about sire to crypto-community
- Promote sire as a new investment vehicle to traditional finance media
- Work to get sire and relic listed on exchanges
- Educational Material about sire, relic and Mints

## 4.2 - Phase Two (August 2018 - TBD)

- Improve sire core web-app functionality and mobile usability
- Develop decentralized exchange contract for: sire, relic, ether, Mints
- Develop traditional Investing Contracts that use only sire and relic
- Get sire and relic listed on more exchanges
- Promote sire Investment DApps[6] and Exchange app
- Reports and Analytics of Ethereum impacts

## 4.3 - Phase Three (TBD)

- Deploy Decentralized exchange for sire, relic, Mint, and Ether
- Deploy Investing DApps that use sire and relic
- Improve web-app (Conglomerate all DApps onto one site)
- Create IOS app
- Create Android app
- Partner with financial institutions to offer sire as an investment vehicle
- Improve Decentralized exchange to work with other popular ERC20 tokens

# 5. Summary

In this paper, we discussed the sire smart contract and how its assets are designed to become a speculative investment vehicle designed to grow alongside Ethereum. sire provides users with immediate and long-term ERC20 asset generation. The sire smart contract introduces two new tokens known as: sire and relic. The sire token has a unique create Mint function that entitles you to collect a specified amount of relic per block based on the amount of sire you own.

Mints created become a speculative asset that can be sent and traded just like the sire and relic tokens. Minting relic with sire will cause that sire to become locked within the Mint object and that sire will be unable to be sent to other addresses. Mints can be collected by the current owner at any time. Collecting a Mint will allow you to redeem any relic you earned during the time period since you created the Mint. In addition to minting relic by locking up your sire, you can also burn your sire providing a large amount of relic instantly destroying the sire. The amount of relic that sire will generate will deflate yearly at a rate of 15%.

Because nearly all of the Ether sent to the contract is locked permanently within it, all of the sire and its minted relic will be backed by the total market value of Ethereum. As the Ethereum network grows and strengthens, the value of sire and the amount of money generated with your relic will increases alongside it as well. sire and relic in the future will be able to participate in a unique investing ecosystem designed to provide users with predictable, steady, and traditional investment opportunities.

# 6. Acknowledgements

# 7. Appendix

1. [Ethereums ERC20 Token Standard](#)
2. **sire** is a Standard ERC20 Token with a Burn and Mint function.
3. **relic** is a Standard ERC20 Token with no special functions. Only difference between relic's and ERC20 is the naming convention of the functions. sire and relic share the same contract, sire was given the standard ERC20 function names and variables. relic standard ERC20 functions will be prefixed with relic.
4. **Mint** in sire is an abstract asset, that contains n number of sire greater than zero. Mint's in sire also have a block at which it was created, and the relic reward rate it gets when the Mint is collected. Mint's can be sent and traded just like ERC20 tokens.
5. "We also theorize that because coins are always lost over time due to carelessness, death, etc, and coin loss can be modeled as a percentage of the total supply per year, that the total currency supply in circulation will in fact eventually stabilize at a value equal to the annual issuance divided by the loss rate (eg. at a loss rate of 1%, once the supply reaches 26X then 0.26X will be mined and 0.26X lost every year, creating an equilibrium)." - [Ethereum Whitepaper](#)
6. [Ethereums Decentralized Application Documentation](#)