



2.5 ANALYSIS

COLLECTIONS REVIEW

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Introduction

In simple terms, we define an NFT collection when the associated digital artwork features a common theme and when each individual NFT represents a unique variation on that theme.

The purpose of this review is to use blockchain data to identify how the market—specifically how market participants—assign value to a collection.


In this analysis, we look at collections deployed on Ethereum Mainnet.

Methodology

As we mentioned in the introduction, our focus is on generative collections. The following are the specific filters we use to select collections:

- 1) **Unique contract:** We limit our sample size to only collections that are deployed with their own ERC721 contract.
- 2) **Sufficient collection sizes:** We imposed a threshold of 1000 tokens minimum per collection. Along with the unique contract criteria, this process effectively removes "one-of-ones" (1:1) and other smaller collections.
- 3) **Fixed supply:** Collections that release their own ERC721 smart contract have a predetermined supply for their primary market (minting period). This constrains our dataset to largely generative PFP collections while excluding games, domains, and other collections with longer or indefinite minting periods.
- 4) **Minting complete:** For our purposes, we are only focusing on collections that have been completely minted out. This criterion also eliminates collections in which the creator forgoes the public minting procedure and immediately sells items from the collection on the secondary market.

Using the following procedure, we build our sample of collections and apply these filters.



First, we retrieved from our database all collections processed by our blockchain intelligence toolset for Ethereum NFTs. This process yielded a preliminary list of 51,742 NFT collections. This set is assumed to represent the entirety of NFT collections.

Second, we check each collection to see if it has a primary ERC-721 smart contract, which narrows our list to 43,747 potential collections. This step removes collections that are generated and then listed for sale on a marketplace to be minted upon purchase.

We add a few data filters in the last phase of constructing our collections sample that are both aligned with our collection requirements and required for our empirical analysis. The primary restriction is that the collection must have a genesis supply of 1,000 tokens or more.

We discovered that the vast majority of collections did not correctly implement the `totalSupply` function of the ERC721 standard. Many collections with contracts that did implement a supply function used a non-standard name syntax (e.g., `max supply`, `max punks`, etc.). As a fallback, we used the total amount of mints issued by a contract as the contract's ultimate supply count. This variable is important to define a key measure of initial collection success: the number of items minted divided by genesis supply. This filter significantly reduced our sample size to 5,633 collections.

In addition, we keep only collections for which we have their primary market (minting process) transaction data, which are required for computing many of our collection-level variables.

The most common reason this data might not have been captured is that the collection was created before marketplaces and may have never been listed. This approach also excludes CryptoPunks and CryptoKitties, two popular collections that predate markets and include smart contracts that do not meet the ERC721 standard. In many cases, the collection was excluded because it had not yet begun its primary sale by the end of the dataset (April 30, 2022).

Finally, we only retain collections where at least 5% of the items sold for a nonzero price during their initial sale (on the primary market). This leaves us with a total of 4,090 collections. This filter represents our assumption that a collection must be for sale to the general public. We narrow this list further by removing any collections that do not have a nonzero floor price, ensuring that all remaining collections potentially have resale value. This final filter brings down our sample size to a final total of 2,677 collections.

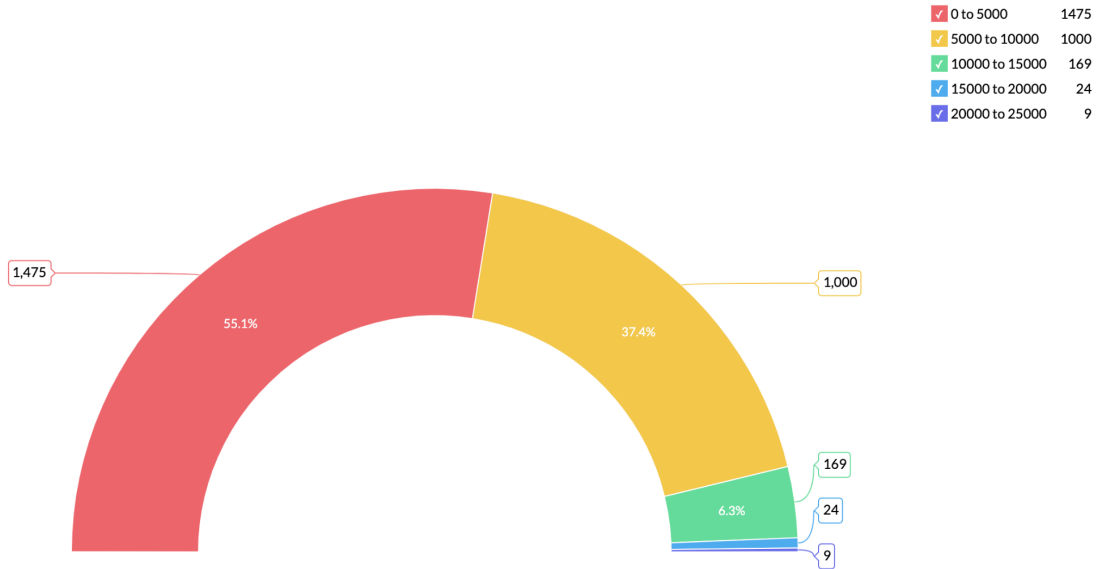
Dataset Summary

		Mean	Std Err	Median	Mode	Std Dev	Variance	Kurtosis	Skewness	10%	25%	50%	75%	90%	Range	Minimum	Maximum	Sum
Collection Size	Total tokens	5205.57	65.21	4465	10000	3374.17	11385001.30	2.07	1.09	1443	2346	4464	7777	9960	23983	1000	24983	13935320
	Supply (per ERC721)	5857.34	121.47	5015	10000	6284.62	39496453.10	865.02	23.16	1285	2947	5009	8888	10000	250000	0	250000	15680093
	Total n tokens minted	4928.51	64.56	4169	10000	3340.10	11156281.50	1.90	1.08	1258	2141	4169	7336	9856	24980	0	24980	13193629
Primary Market	Mint Price (Mode)	0.07	0.01	0	0	0.28	0.08	1183.80	29.77	0.00	0.00	0.03	0.08	0.12	12	0	12	183
	Mint Price (Mean)	0.16	0.09	0	0	4.80	23.00	2658.99	51.48	0.00	0.00	0.03	0.08	0.13	248	0	248	434
	Total days till end of mint (approx)	31.60	1.14	4	0	58.74	3449.94	5.99	2.47	0	1	4	31	114	370	0	370	84602
Secondary Market	Total Sales	5422.56	128.20	2751	790	6632.99	43996508.80	7.95	2.30	383	855	2743	7913	14413	59872	55	59927	14516205
	N unique tokens sold	2929.58	52.03	1991	318	2691.89	7246249.49	0.88	1.11	345	719	1990	4665	7143	19274	53	19327	7842475
	Percentage of Unique / Tokens	51.26	0.53	53	100	27.20	739.82	-1.22	-0.08	12	27	53	75	87	95	5	100	137215
Investors	Holder at mint	1576.88	29.96	1130	0	1550.18	2403052.04	15.98	2.96	325	586	1130	1976	3484	18014	0	18014	4221313
	Current Holders	2006.46	32.02	1509	808	1656.52	2744059.38	7.05	1.87	445	798	1509	2775	4325	18005	47	18052	5371293
	New holders (current - mint)	686.89	15.55	360	10	804.49	647201.32	3.90	1.81	38	100	360	992	1821	6746	1	6747	1838801
Price	Holder all time	2977.45	57.13	1933	1118	2955.66	8735943.01	7.08	2.13	492	955	1930	4014	7191	28539	47	28586	7970637
	Current Floor Price	0.21	0.04	0	0.0009	2.24	5.02	778.72	26.56	0.0005	0.0030	0.0190	0.0650	0.1983	74	0	74	553
	Royalty Fees	855.97	5.42	800	750	280.45	78651.37	0.34	-0.44	500	750	800	1000	1250	2250	0	2250	2291435
	Other transfers	830.60	30.50	348	1	1578.04	2490197.67	62.52	6.41	39	128	348	887	2019	24339	0	24339	2223508

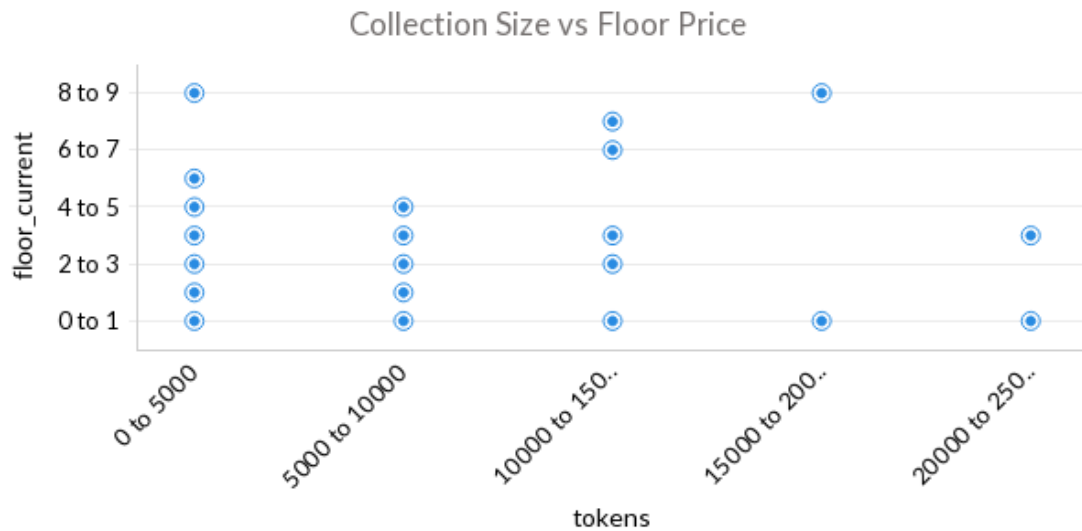
Note: The sample size of transaction-level data collected for the collections in our sample is described in this table. The word "mint" is used in practice to refer to a new item's primary market sale and on-chain generation. Any post-mint transaction that is transferred directly from the collection's smart contract (i.e. not through a marketplace such as OpenSea) is a "transfer."

Collection Size (tokens)

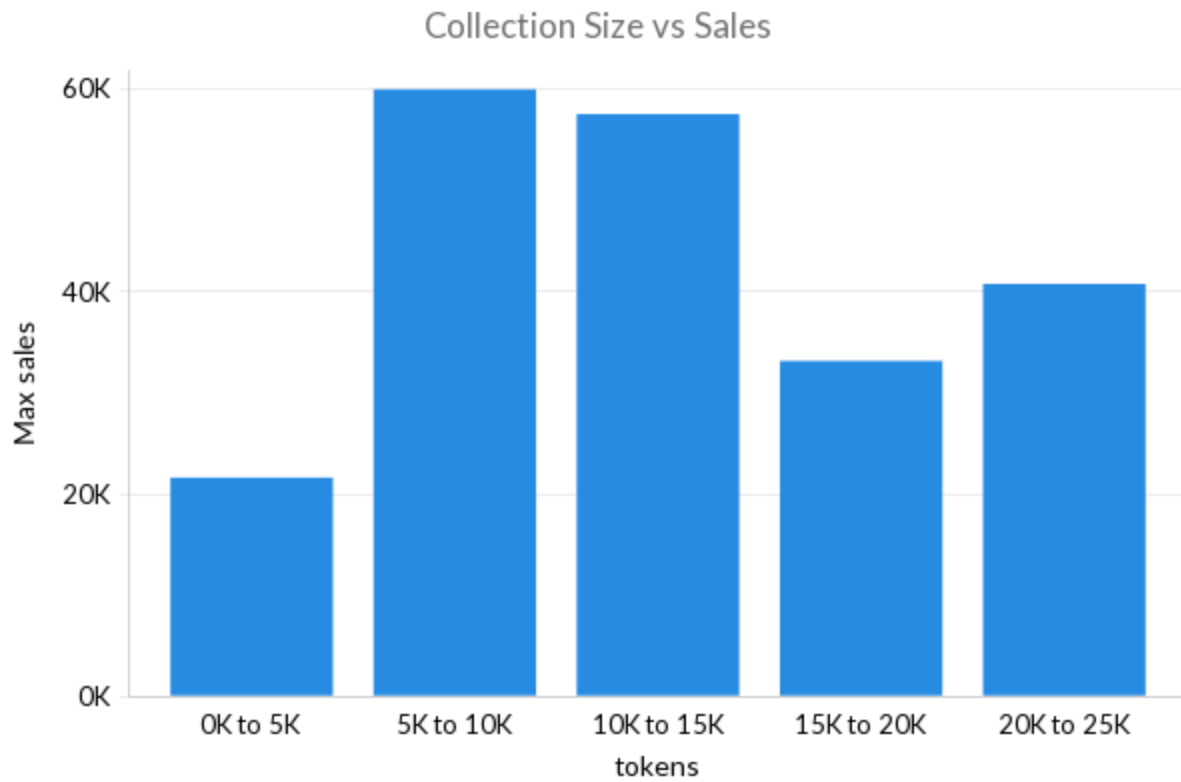
First, we analyze the collection sizes (number of tokens created) throughout our sample.



Despite the fact that just 6.3 percent (169) of our sample's collections had minted between 10,000 and 15,000 tokens, there were 90 collections with a genesis supply of 10,000 tokens, making it the most frequent supply size in our sample.



We found no correlation between collection size and the subsequent floor price.

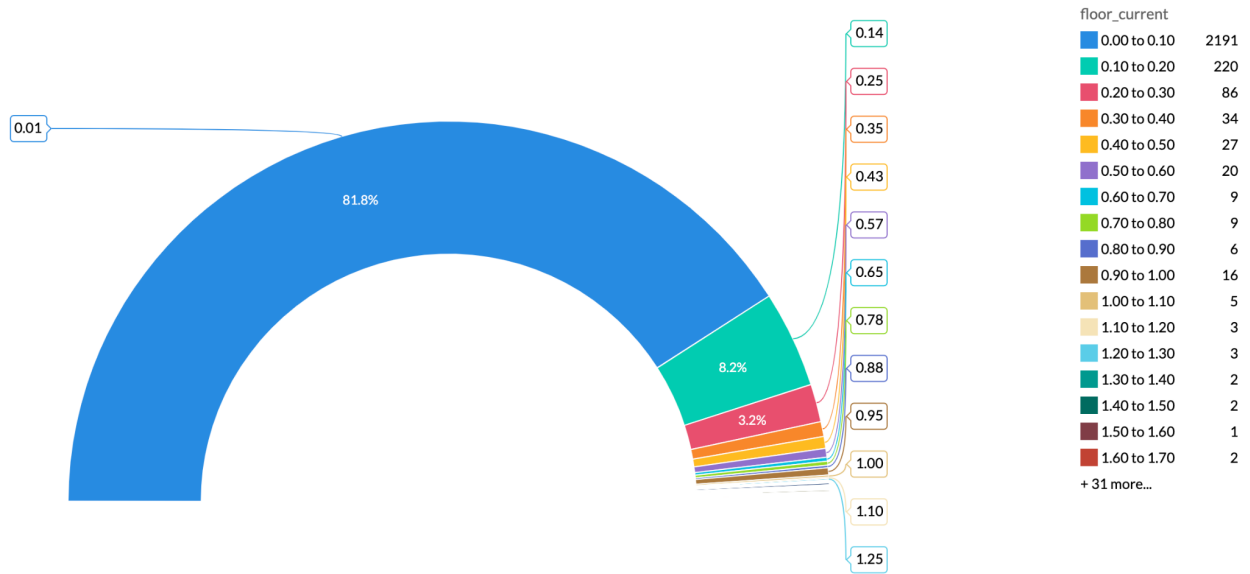


As anticipated, collection sizes ranging from 5,000 to 15,000 were the most popular among investors and accounted for the majority of sales volume.

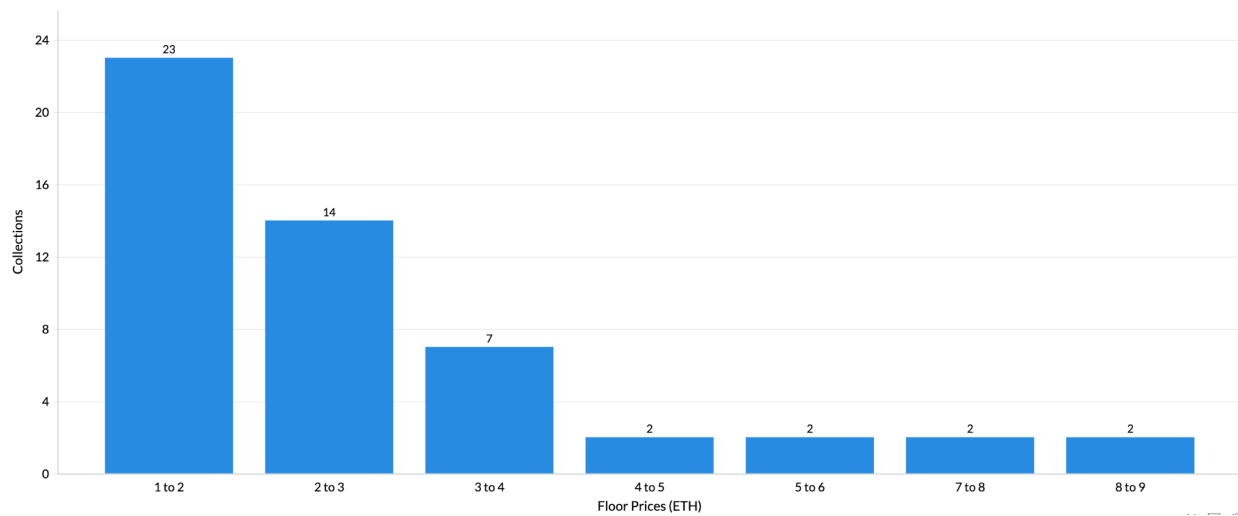
Floor Price

Looking at floor price data, we discovered that relatively few collections ever managed to break through the 0.1 ETH barrier, with just 18.2% of collections having a higher floor price.

Furthermore, 68 collections had a floor price of 0.03 ETH, making it the most prevalent floor price in our sample size. The lowest floor price was 0.0119 ETH.



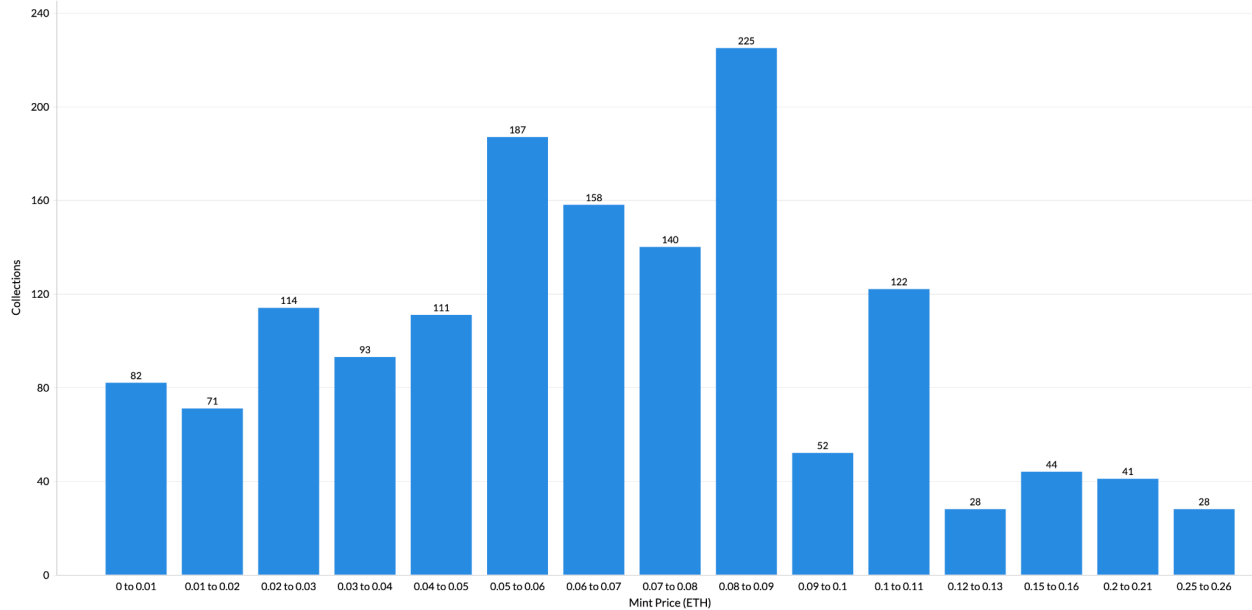
And only 63 collections managed to rise above 1 ETH.



Note: 1 ETH brackets are used to segment the data. Collections with no neighbors within their range have been filtered out.

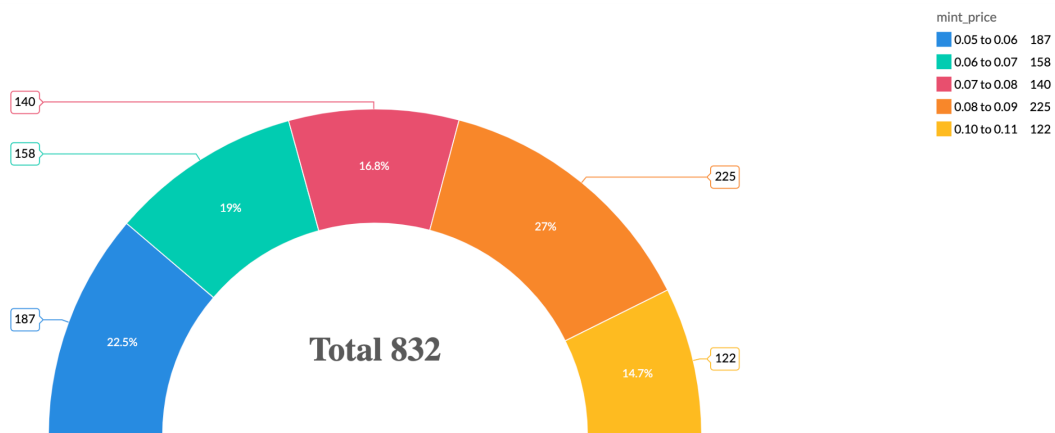
Minting

A total of 13,935,320 tokens were minted from the collections in our sample size.

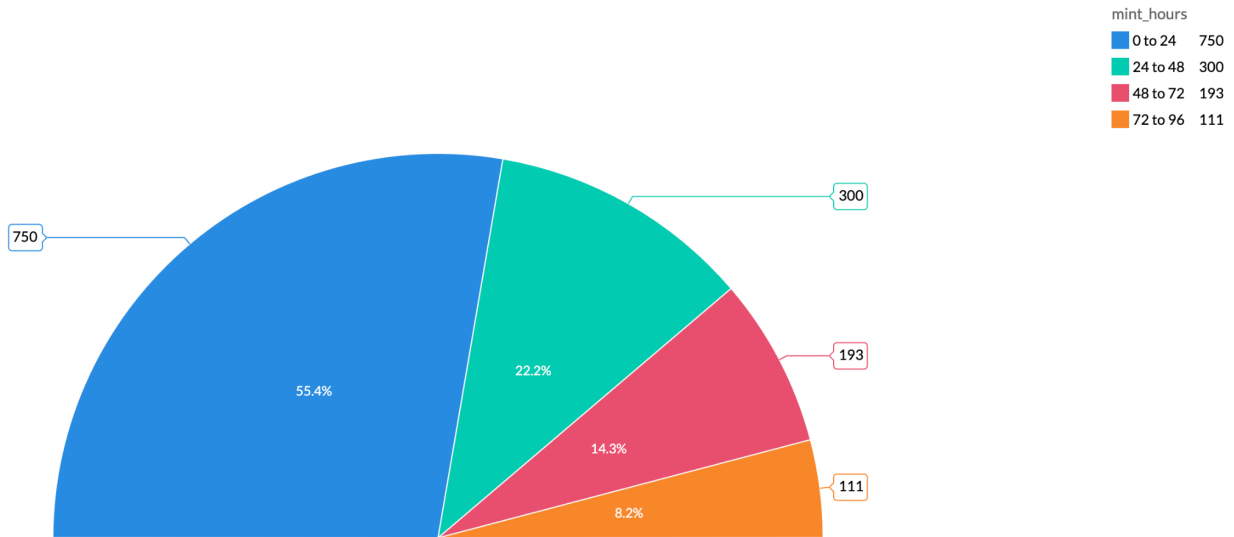


Note: This table only displays collections with non-zero mint prices and mint price ranges with more than 22 collections in each bracket. Mint prices were more diversified and irregular below this count, thus thresholds of 22 and lower are filtered out to make the table more understandable. We discovered 1,021 collections that did not have a mint price; we will go into more detail on free mints in future reports.

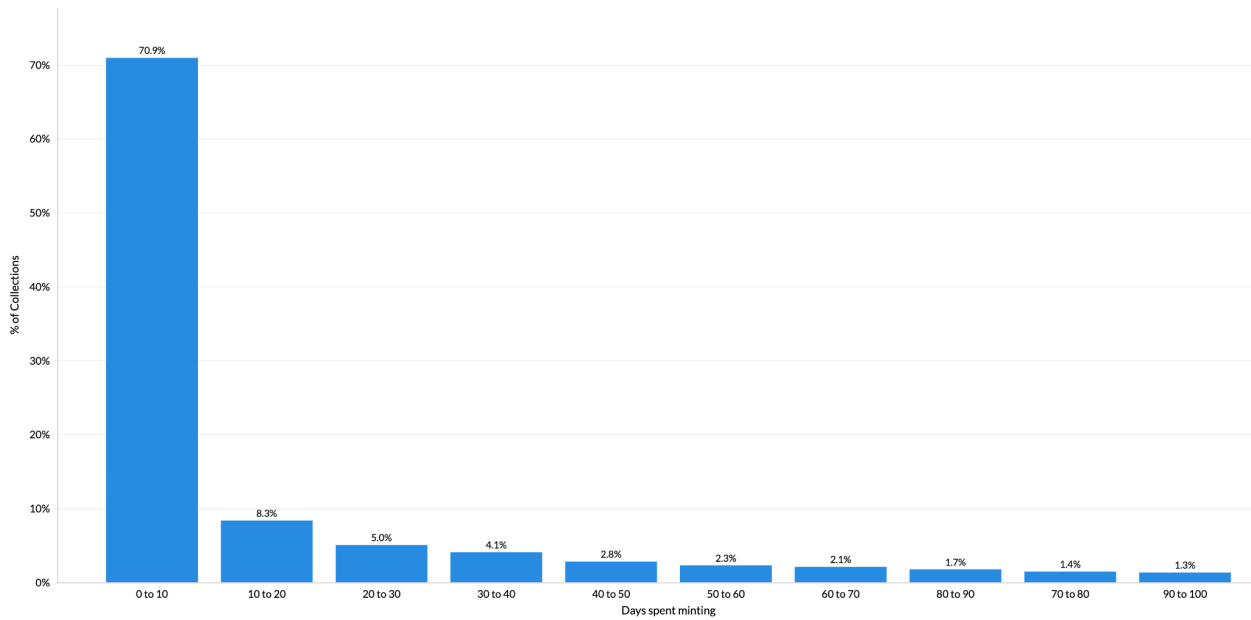
The most popular mint price ranges were 0.08 - 0.09 ETH and 0.05 to 0.06 ETH accounting for 31% of all collections in our sample size.



The majority (55.4%) of collections in our sample were minted out in less than 24 hours.



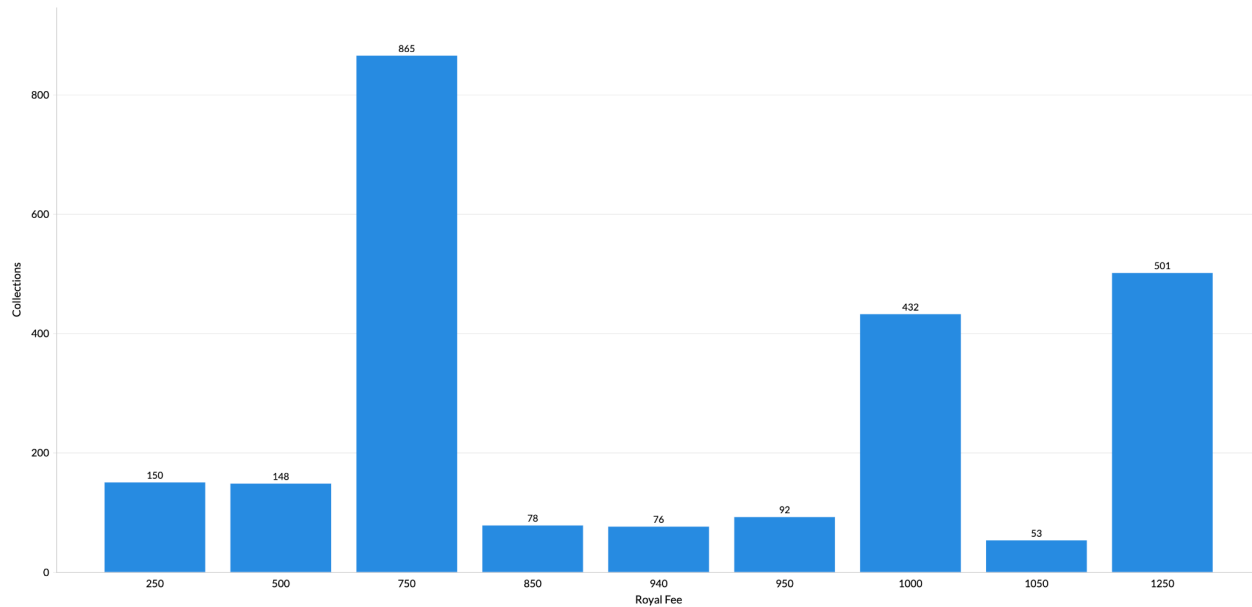
The bulk (71%) of the collections in our sample were minted out in less than 10 days.



Note: Collections that took more than 100 days to mint have been filtered out.

Royalty Fees

Most collections have a **royalty fee of 7.5%** and only 27 collections (0.01%) did not have any royalty fees set.



Note: Royalty Fee amounts set by less than 50 collections each have been filtered out.

While collections decided on typical fees of roughly 750, 1000, and 1250, we found no correlation between royalty fees and collection size, number of holders or floor price.

Conclusion

There are a multitude of factors that contribute to the success of a collection but as we have observed in our preliminary review, some indicators are more likely to correlate to a collection's success.

While smaller collection sizes are more prevalent, 10k PFP collections are unquestionably more popular among investors when it comes to trading. When it comes to mint pricing, the answer is simple: if in doubt about choosing an optimum mint price, a price bracket of 0.05 to 0.09 is a safe bet as indicated by the market. A healthy royalty fee of 7.5 percent is also fairly acceptable for most investors.

If a collection manages to reach over a floor price of 0.1 ETH, it is already in the top 20% in terms of floor price. Getting to this ceiling, on the other hand, is a challenging process that begins after overcoming the primary market obstacles. We recognize that the minting process may be quite stressful for many creators, and as evidenced by the data, it is critical to guarantee that your collection mints swiftly. 2.5 gives you free tools to help you curate your allowlists. We are confident that with our assistance, creators will have a better chance of executing a successful mint.

2.5 Intelligence builds real-time intelligence tools for web3 creators to create unique experiences powered by on-chain data.

For more reviews like this and further research, as well as access to a slew of free tools, visit <https://2.5.dev> and come chat with us on <https://discord.gg/2-5>



Disclaimer

Keep in mind that these assessments are based on historical data, and we are not liable for financial decisions made based on the material presented in this document. When committing to the execution of a collection, creators should constantly consider current market conditions and the overall attitude of market participants.