

What is PhotoDater™ and how does it work?

PhotoDater™ is a groundbreaking, free new feature that estimates the year a photo was taken, using Artificial Intelligence (AI) technology.

PhotoDater™ is one-of-a-kind: MyHeritage is the only genealogy service that offers date estimation for historical photos. Using powerful technology developed by our AI team, PhotoDater™ gives its best guess when a photo was taken. This can help you unlock further clues about who appears in the photo and the event at which it was taken, to solve mysteries in your genealogy research.

PhotoDater™ is completely free!

How it works

PhotoDater™ uses a proprietary machine learning algorithm developed by MyHeritage to provide an estimate of the year when a photo was taken. The date estimation algorithm was trained on tens of thousands of curated, definitively dated historical photos to help the algorithm understand nuances such as clothing, hairstyles, facial hair, furniture, and other objects that are characteristic of a particular decade.

The historical photos used to train the model came from open-source repositories such as the Library of Congress. The algorithm provides date estimates for undated photos taken between 1860 and 1990, for which it is reasonably

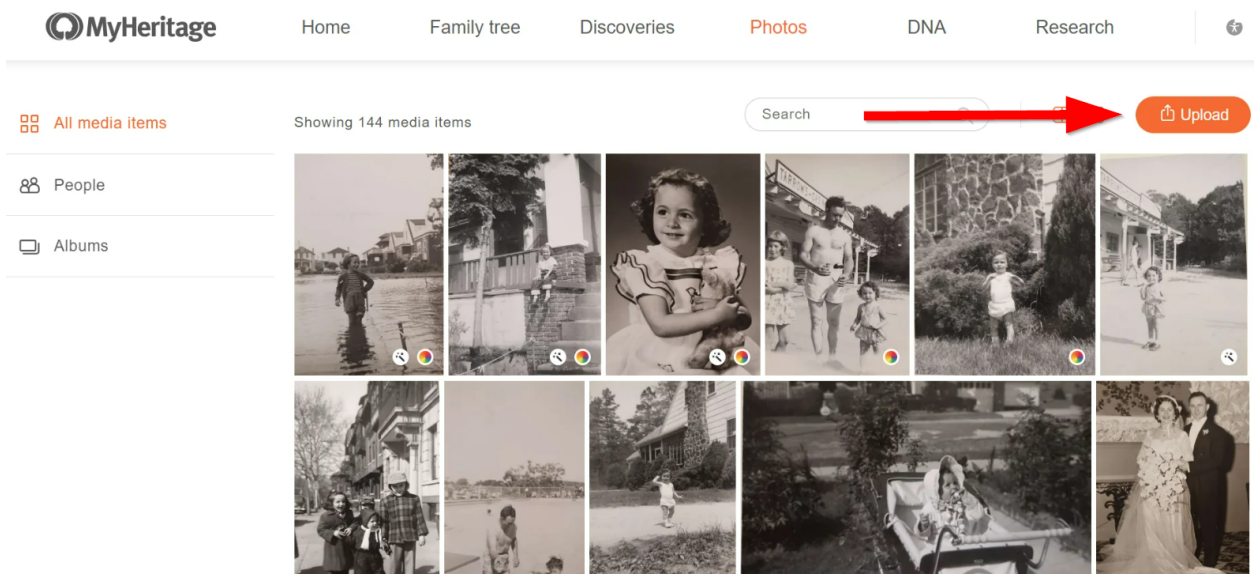
confident it can return results with high accuracy. Estimates are calculated only for photos that do not already have a date in the metadata, that include people, and that are actual photographs, not documents or gravestones. A photo of just a car or a scan of a historical record won't receive a date estimate. Date estimates can be reviewed and saved by you to the photo's metadata, or dismissed. If you prefer not to see any date estimates, you can turn off PhotoDater™ from the site settings menu. Extensive testing of the algorithm's accuracy, conducted using definitively dated photos that were not used in the original training set, revealed the estimates to be extremely accurate, not just on a decade level, but often closer to an actual year. Analysis of the testing set, displayed in the graph below, shows that for approximately 60% of the photos, PhotoDater™ provided date estimations that were within 5 years of the actual dates the photos were taken.

Accessing PhotoDater™

To use PhotoDater™, visit MyHeritage and click "Photos" in the main menu. If you have undated photos that aren't on MyHeritage yet, upload them first to receive PhotoDater™ estimates.



The My Photos page will be displayed. Click the “Upload” button in the top right corner to upload more photos.

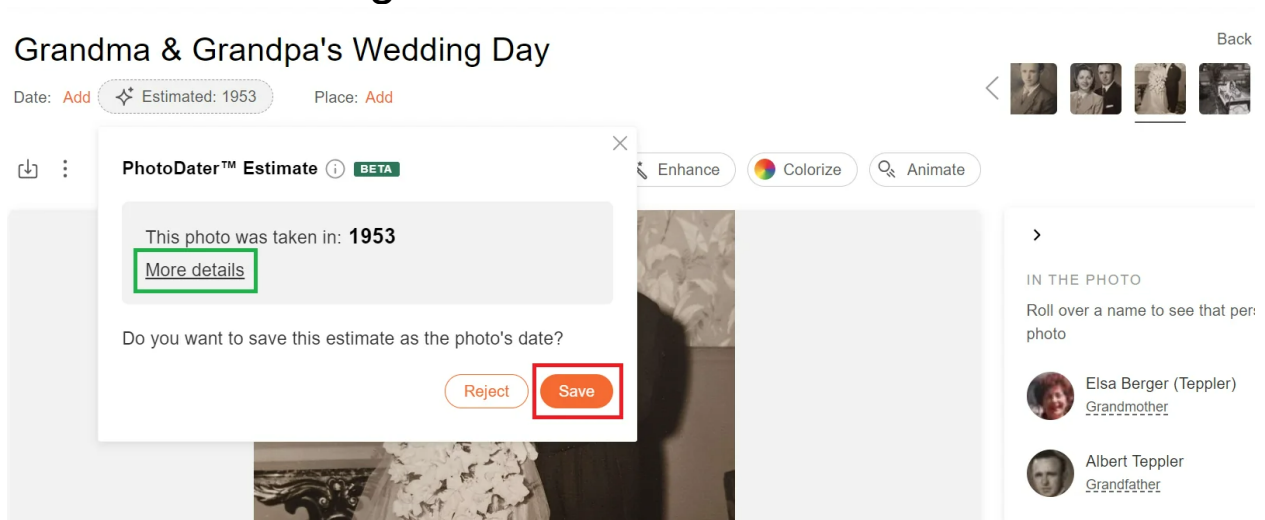


Click any photo’s thumbnail to view the Photo Page.

The screenshot shows the MyHeritage interface for a photo titled "Grandma & Grandpa's Wedding Day". The navigation bar at the top includes "Home", "Family tree", "Discoveries", "Photos", "DNA", and "Research". Below the title, there are fields for "Date: Add" and "Place: Add". A red box highlights the text "Estimated: 1953" which has appeared above the photo. The photo itself is a black and white wedding photograph of a woman in a long white dress and a man in a dark suit. To the right of the photo are buttons for "Enhance", "Colorize", and "Animate". Further right, there is a "Back t" link and a row of four small photo thumbnails. Below the main photo, there is a section titled "IN THE PHOTO" with the instruction "Roll over a name to see that pers photo". It lists two people: "Elsa Berger Grandmother" and "Albert Teppler Grandfather", each with a small circular profile picture. Below this is a "Tag another person" button. At the bottom right, there is a "DETAILS" section with fields for "Keywords: Add", "Notes: Add", and "Albums:".

Whenever you view the Photo Page, if the photo is undated, PhotoDater™ will work automatically in the background to generate a date estimate. If its confidence is good enough, the estimate will automatically appear after a few seconds, above the photo, as marked in red in the above screenshot. Otherwise, no date estimate will appear. Occasionally, PhotoDater™ is unable to provide an estimate for a given photo due to the photo's quality or other factors. Date estimates are not automatically saved to the photo's metadata; because they are estimates, they need to be confirmed manually. It takes a few seconds for an estimate to get calculated and appear for the first time, but from that moment on it will be displayed instantly.

You can click the estimate to open a pop-up window where you can save the estimate (marked in red below), or reject it. To learn more about the estimate, click “More details,” marked below in green.



Clicking “More details” opens a histogram that explains more about the date estimate for the photo, and shows the confidence level of the estimate, as well as an average error range. In the example below, the histogram indicates a 90% confidence level that the photo was taken in 1953, with an average error range of 5 years, which means it was likely taken between 1948–1958. According to the histogram, there’s also a small possibility the photo was taken in the 1940s. The 1953 estimate is quite close — the particular wedding photo shown in this example was actually taken in 1951.



PhotoDater™ Estimate (i) BETA

This photo was taken in: **1953**



Confidence level
90%

Average error
± 5 years

The confidence level is based on the distribution of probabilities by decade shown in the graph above

Do you want to save this estimate as the photo's date?

Reject

Save

The histogram is very helpful because it gives you more information about the estimate. In the example above, it shows that if not from the 1950s, the photo was probably taken in the 1940s.

PhotoDater™ also works on photos originally taken in color.

Privacy

Photos uploaded to MyHeritage by users were not used to train the AI model. When PhotoDater™ processes a photo to give a date estimate, this is done on MyHeritage's servers and the photo is not shared with any third party. Many users will no doubt enjoy gaining new insights through this feature, while others may prefer to avoid estimates and only rely on hard facts. If you prefer not to receive date estimates for your photos, you can disable PhotoDater™ from the site settings menu by clicking My Privacy > Content and unchecking the box for PhotoDater™.

Availability

PhotoDater™ is a **FREE** feature that is available on all MyHeritage platforms, i.e., the MyHeritage website, the MyHeritage mobile app and the Reimagine app.