



Progeny Free Online Pedigree Tool

Sponsored by Ambry Genetics

Progeny Free Online Pedigree Tool

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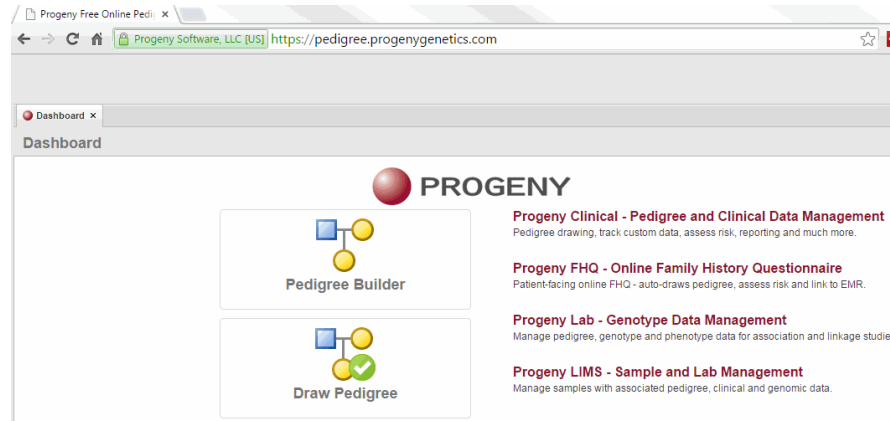
support@progenygenetics.com

<http://www.progenygenetics.com>

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Launching the Pedigree Tool

Open <http://www.progenygenetics.com/online-pedigree/> and select Begin Pedigree to access the Progeny Genetics Free Online Pedigree tool:

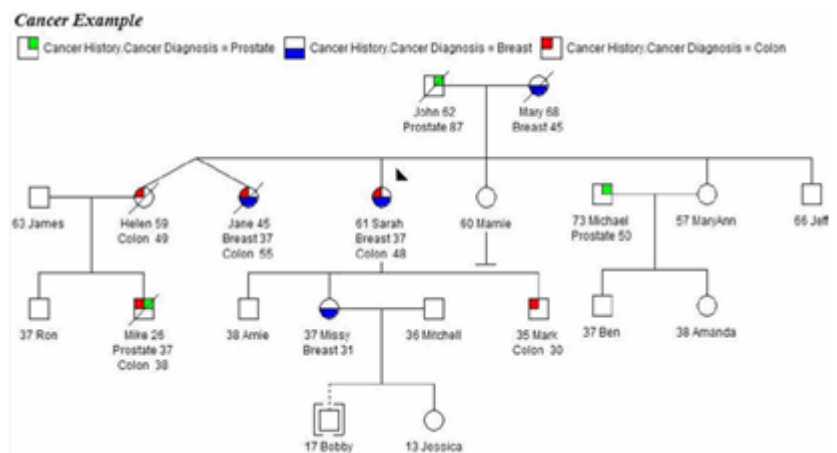


View the Web Browser Requirements below or [Progeny 9 System Requirements](#) for more information:

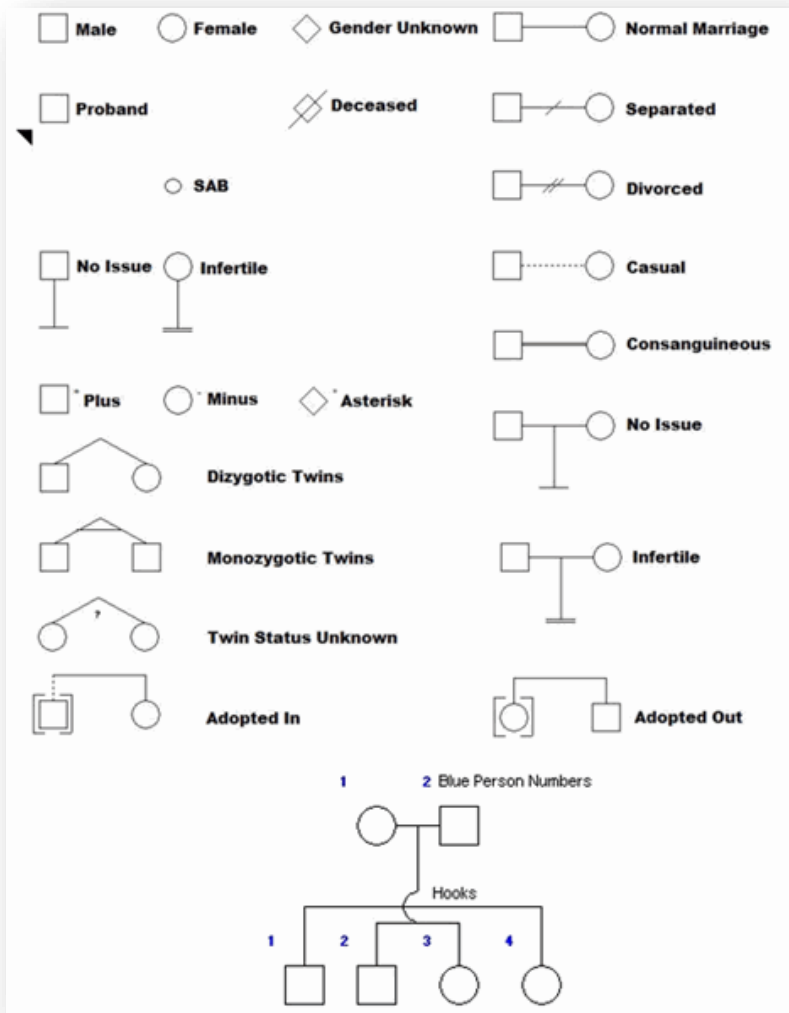
Web Browser Requirements		
Compatible Browsers	Optimal Viewing	Not Supported
Google Chrome Mozilla Firefox Internet Explorer V9 or newer Apple Safari	1024x768 minimum screen resolution Recommend browser with full HTML-5 compatibility (Chrome, Firefox, IE10)	Internet Explorer Versions 6-8 Apple Safari for Windows

Overview of a Pedigree

A pedigree, also known as a genogram, is a diagram that depicts individuals who are related by blood or another factor. Different icons represent different types of individuals. For example, a square icon indicates a male individual, a circle icon indicates a female individual, and a diamond icon indicates an individual of unknown/undetermined gender. Symbols are applied to icons to graphically represent data about the individual, such as individuals with a cancer diagnosis that equals Breast. A legend identifies each symbol. The lines connecting individuals identify the relationship between two individuals, such as marital status. The icon subtext, which is the text that is displayed above or below an individual icon on a pedigree, is specific for the individual. Example of a pedigree →



Pedigree Icons and types of relationship connections →



The Progeny Free Online Pedigree Tool does not have any capability for saving a pedigree to resume later. Users must complete the entire pedigree within a single session as the only options for saving the pedigree are to generate a PDF document or PNG image file.

There are two options to begin working with Progeny Genetics Free Online Pedigree tool:

1. [Pedigree Builder](#) – This option features guided prompts for pedigree name, gender of the proband, and the number of children, siblings, aunts and uncles (in relation to the proband) – once all information is entered the system will automatically generate the pedigree.
2. [Draw Pedigree](#) – This option skips the guided prompts after pedigree name and automatically displays a basic three – generation pedigree (proband, two parents and four grandparents). Users can then build the full pedigree from this starting template.

Pedigree Builder

1. Select **Pedigree Builder**.
2. Enter information for each prompt and click **Next**. →

What is the Gender of the Proband?

Male

Female

What is the name of the pedigree you want to create?

Example Pedigree

How many brothers does the proband have?

How many sisters does the proband have?

How many sons does the proband have?

How many daughters does the proband have?

How many brothers does the proband's father have?

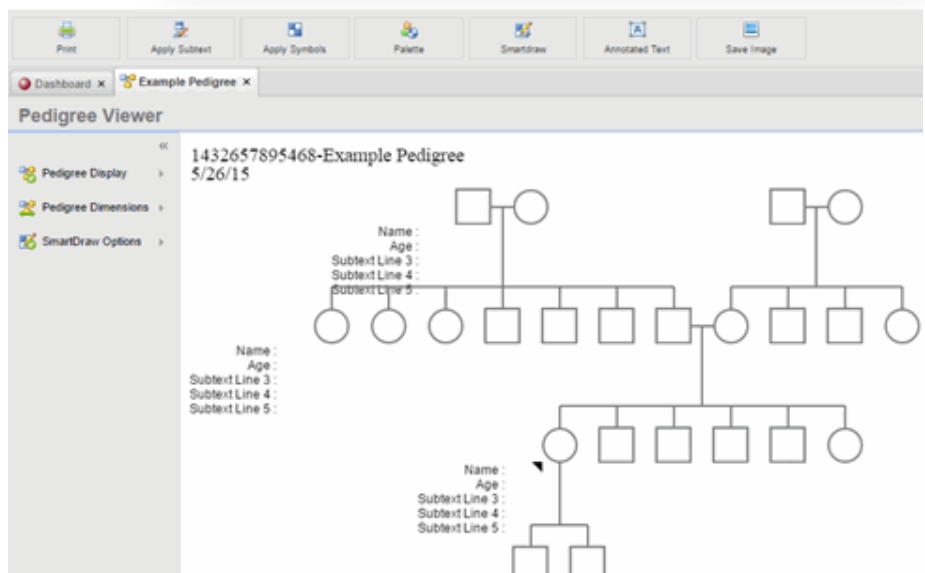
How many sisters does the proband's father have?

How many brothers does the proband's mother have?

How many sisters does the proband's mother have?

Users can click from field to field entering values or can click the first field then use the Tab button to move down the list. →

3. A pedigree is generated with the provided information and the proband is indicated by a black triangle in the lower left corner of its icon. →
4. With the basic pedigree built continue to [Pedigree Viewer Toolbar and Display Options](#).



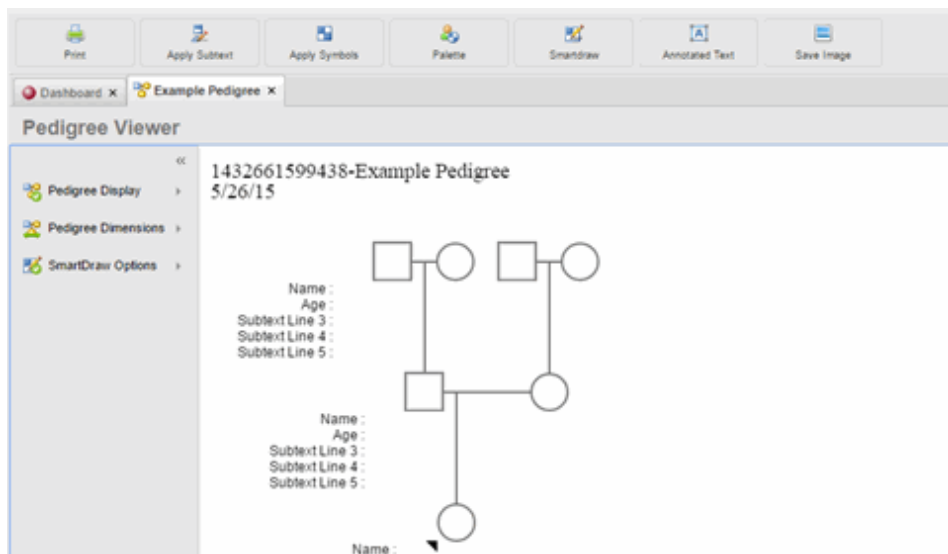
Draw Pedigree

1. Select **Draw Pedigree**.
2. Enter information on prompt and click **Next**. →


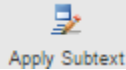
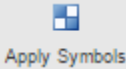


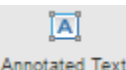



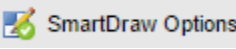
What is the name of the pedigree you want to create?

Example Pedigree

3. A simple 3 generation pedigree is created with the proband, two parents and four grandparents. The proband is indicated by a black triangle in the lower left corner of its icon. →



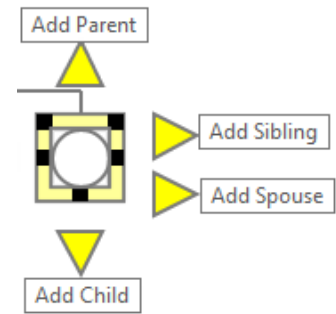
Pedigree Viewer Toolbar and Display Options

Button	Description
	Print the Pedigree as shown
	Configure and Apply Subtext (text displayed for each individual in the pedigree)
	Configure and Apply Symbols (condition status for each individual in the pedigree)
	Use the Palette to Add Individuals
	SmartDraw by default will automatically adjust the position of an individual to place them in the ideal location within the pedigree. This ideal location is in relation to both the individual's current position and the positions of other surrounding individuals.
	Configure additional text on the pedigree – Annotated Text
	Save image as a png file or other desired format, like jpg
	Configure Pedigree Display
	Configure Pedigree Dimensions
	Configure SmartDraw Options


Add Individuals to Pedigree

Use One-Click to Add Individuals

1. Select the individual to add a relationship.
2. Hover the mouse over one of the yellow arrows to see the add option. →
3. Select the relationship to add and a new icon is drawn with the relationship connection. Note: holding down the CTRL key and adding a sibling will create a twin relationship.

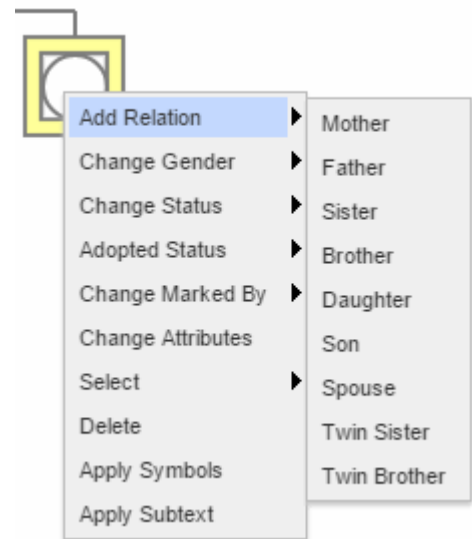


The Individual Context Menu (right-click menu)

This menu allows for a variety of options when working with individuals. It can be used on macs when the user clicks on the individual and uses the green plus button  to the left of the icon.

To Use the Individual Context Menu

1. Right – click on the individual to open the context menu →
The following options are available:



a. Add Relation

- i. Mother, Father, Sister, Brother, Daughter, Son, Spouse, Twin, Sister or Brother (supports multiple spouses and half siblings).

b. Change Gender

- i. Male, Female, Unknown (the system will not allow users to change the gender of an individual if that individual is part of a spouse pair).

c. Change Status

- i. Deceased, Alive

d. Adopted Status

- i. None, Adopted in, Adopted Out

e. Change Marked By

- i. None, Asterisk (*), Plus (+), Minus (-)

f. Select

- i. Relatives, Ancestors, Descendants, Siblings, Parents, Children, Spouses, Aunts/Uncles, 1st Degree, 2nd Degree, 3rd Degree, 4th Degree, 5th or Higher

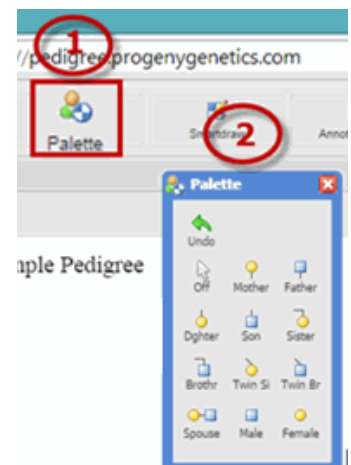
g. Delete

h. Apply Symbols

i. Apply Subtext

Use the Palette to Add Individuals

1. Select the **Palette** button and the Palette dialog box opens. →
2. Select the type of individual to add and click where the new icon belongs.
3. The pedigree will automatically redraw the icons after adding the new one.



Subtext

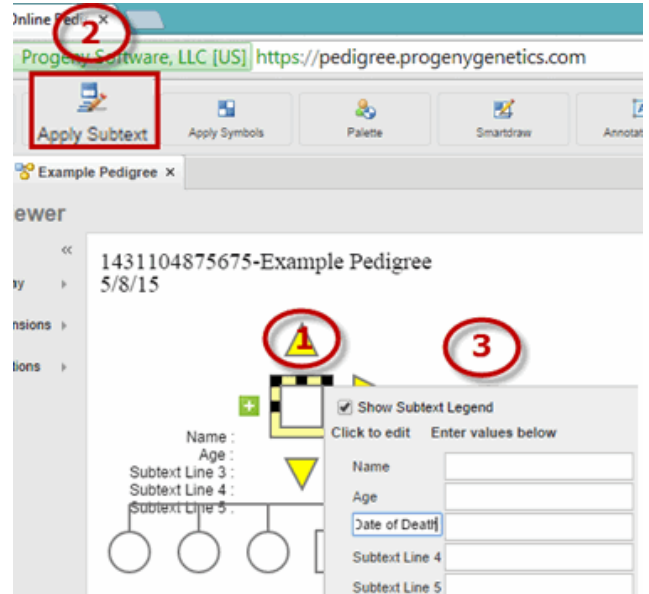
Subtext is the text displayed for each individual in the pedigree. The subtext is configurable and users can have a maximum of five subtext lines within a pedigree. →

Name :
Age :
Subtext Line 3 :
Subtext Line 4 :
Subtext Line 5 :

To Configure the Subtext Legend

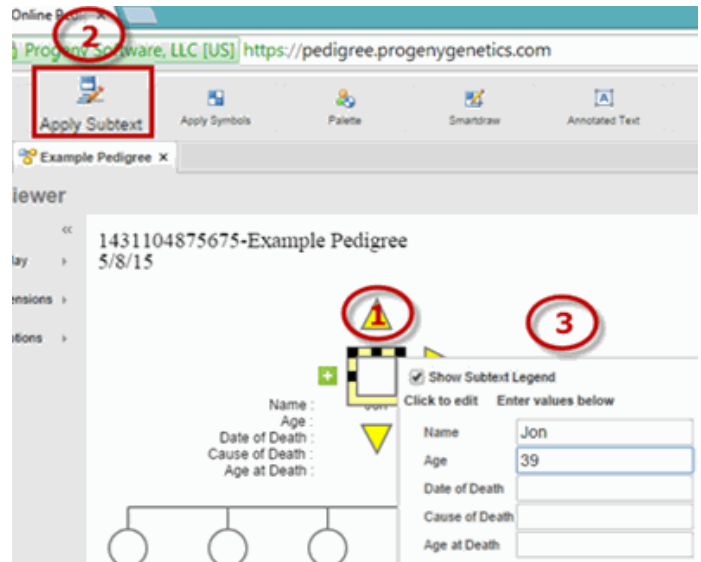
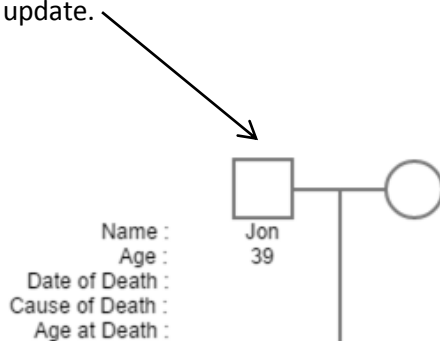
1. Select an Individual →
2. Click **Apply Subtext** and the subtext dialog box opens. Modify any/all of the 5 subtext lines. Click the line and enter the text as needed. Changes are not saved unless users click to another field within the subtext window after entering the data.
3. Uncheck/ check Show Subtext Legend to hide/ view subtext legend.
4. When finished click outside the dialog box to close it to see the new subtext.

Name :
Age :
Date of Death :
Cause of Death :
Age of Death :



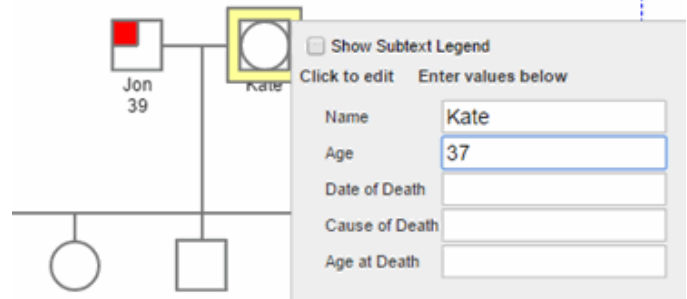
To Apply Subtext to an Individual

1. Select the individual on the pedigree. →
2. Select **Apply Subtext** and the subtext dialog box opens.
3. Input subtext. Changes are not saved unless users click to another field within the subtext window after entering data. When finished click outside the dialog box to see the update.



Use the Context Menu to Add Subtext to Individuals

1. Right-click the individual.
2. Select **Apply Subtext** and the subtext dialog box opens.
3. Input individual subtext (upon entry the data is auto saved) →
4. Repeat steps 1-3 until all individuals have subtext.

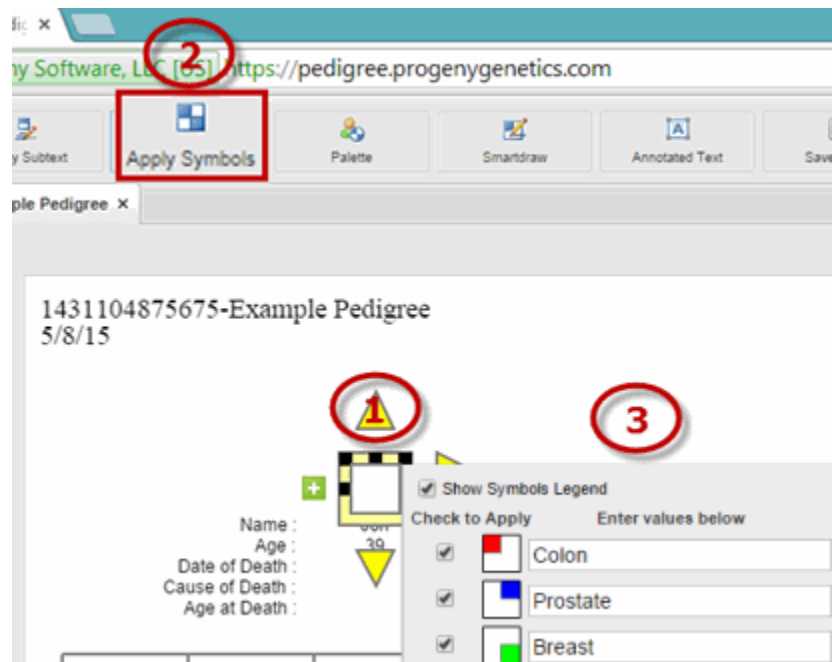
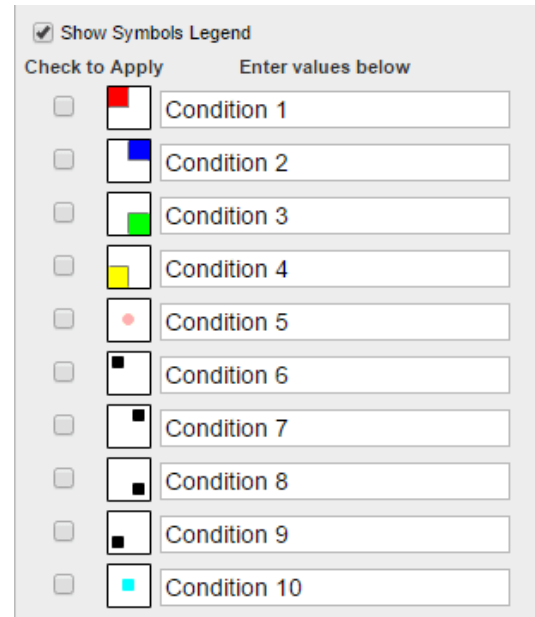


Symbols

Symbols are used within icons to depict conditions for individuals. Symbols are configurable. →

To Configure Pedigree Symbols

1. Select an Individual.
2. Select **Apply Symbols** and the symbols dialog box opens.
3. Check mark each symbol to be used and enter a value for the condition (up to 10 distinct symbols within a pedigree, though in practice only 9 symbols can be applied to anyone person as the Condition 5 and Condition 10 symbols will cover one another). When finished click outside the dialog box to close.



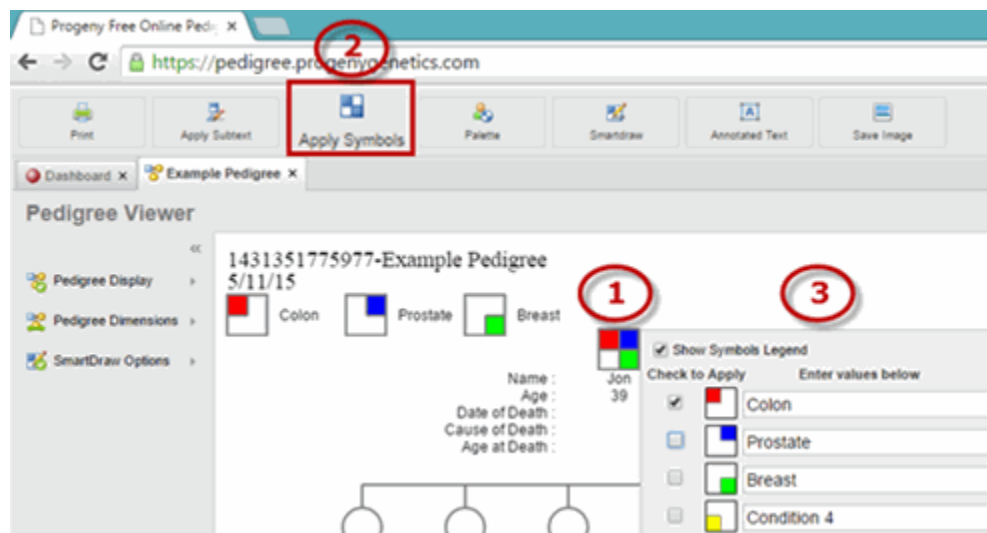
4. The symbols legend displays and the individual is shown to be affected by all conditions.



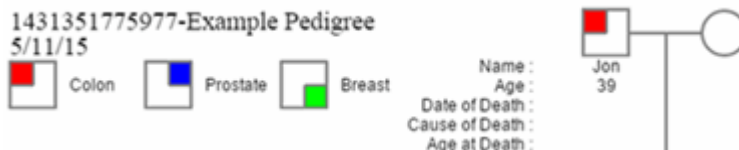
5. Now that the individual was used to create the symbols legend, follow the steps below to [Modify Symbols for an Individual](#) to correctly identify this individual's conditions.

To Modify Symbols for an Individual

1. Select the individual.
2. Select **Apply Symbols** and the symbols dialog box opens. →
3. Check/uncheck the box for the condition(s) to apply to the individual. When finished click outside the dialog box to close.

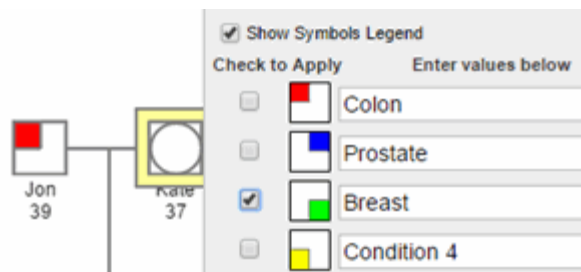


4. Now the individual is showing with their condition. →



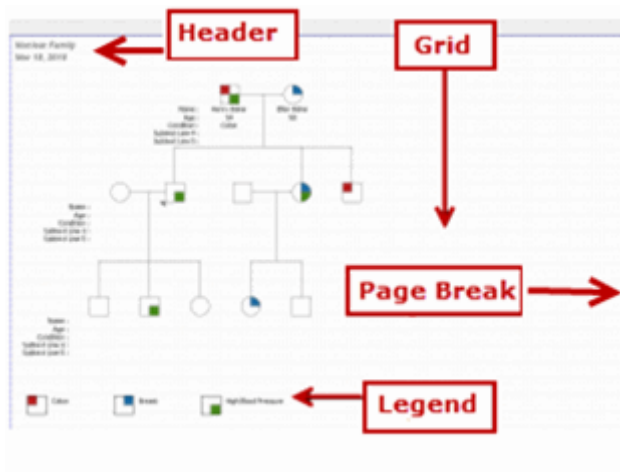
Use Context Menu to Add Symbols to Individuals

1. Right-click the individual.
2. Select **Apply Symbols** and the symbols dialog box opens.
3. Select the conditions that apply (upon entry the data is auto saved). →
4. Repeat steps 1-3 until all individuals have the appropriate symbols.



Customize the Pedigree Display

Pedigree Display Features



Pedigree Display Options

A screenshot of the 'Pedigree Viewer' settings panel. The panel is titled 'Pedigree Viewer' and has a sub-title '1431090382326-Example Pedigree'. The settings are organized into three main sections: 'Pedigree Display', 'Pedigree Dimensions', and 'SmartDraw Options'. The 'Pedigree Display' section contains the following options:

- Show Grid
- Snap To Grid
- Show Page Breaks
- Show Header
- Show Footer
- Show Symbols Legend
- Show Subtext Legend
- One Click Add
- Auto Draw
- Show Haplotypes
- Show Linkage Settings
- Use Hooks
- Show Blue ID #
- Show Date

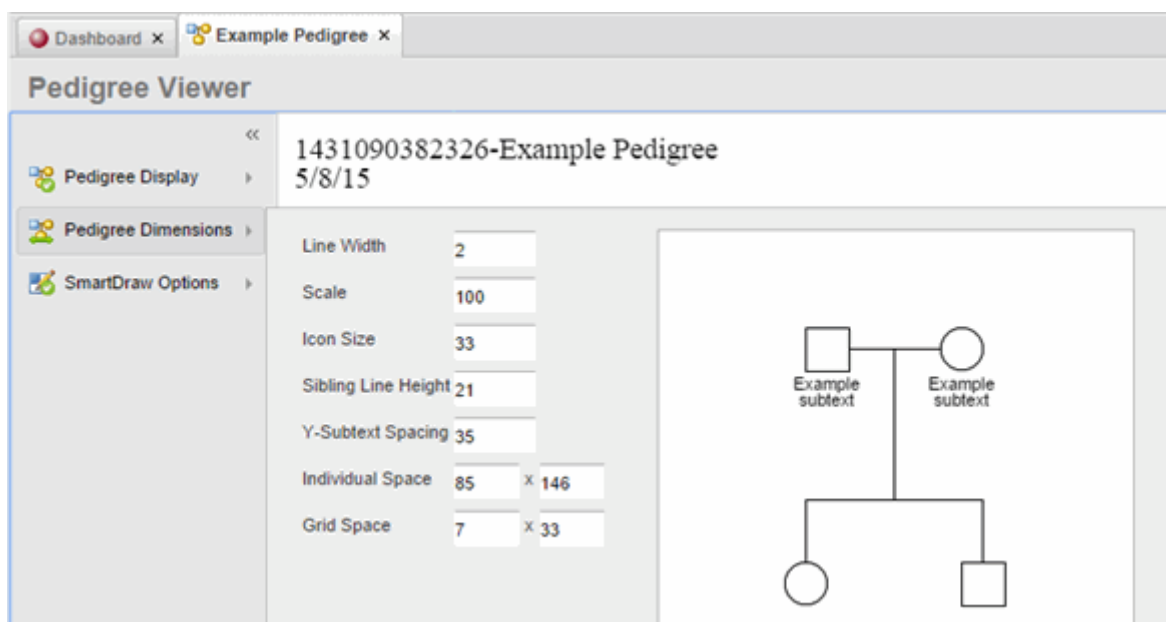
Below these options, there are several controls:

- Proband Arrow Position: Lower Left (dropdown menu)
- Icon Subtext Font: Arial (font family dropdown) and 9 (font size dropdown)
- Header: 1431090382326-Example Pedigree (text input field)
- Footer: (empty text input field)

Pedigree Display Descriptions

Option	Description
Show Grid	Displays a grid on the pedigree canvas.
Snap to Grid	When moving an icon in the pedigree, aligns (or “snaps”) the icon to the nearest intersection of lines in the grid, even if the grid is not visible.
Show Page Breaks	Displays print boundaries on the pedigree as blue dashed lines.
Show Header/Show Footer	Displays a header or footer on each page of the pedigree.
Show Symbols Legend	Displays a legend for the symbols shown on the pedigree.
Show Subtext Legend	Displays a legend for the icon subtext displayed in the pedigree.
One-click Add	Allows you to click on specific handles on an individual icon to automatically add a relationship to the individual. (You do not have to manually add relationships from the palette or drag lines between icons to create relationships).
AutoDraw	Automatically runs SmartDraw every time you add an individual to a pedigree. You can then define your SmartDraw options. See Smart Draw Options .
Show Haplotypes	This function is not turned on in the Free Pedigree Tool
Show Linkage	This function is not turned on in the Free Pedigree Tool
Use Hooks	Distinguishes between lines that cross over one another. See Overview of Pedigree Icons for a graphical depiction of hooks.
Show Blue ID#	Display a blue number next to an icon in a pedigree to indicate the ordering of individuals from left to right in a generation. See Overview of Pedigree Icons for a graphical depiction of blue number. Users can change the position of blue number on the Dimensions tab.
Show Date	Display the current date in the upper left hand corner of the pedigree.

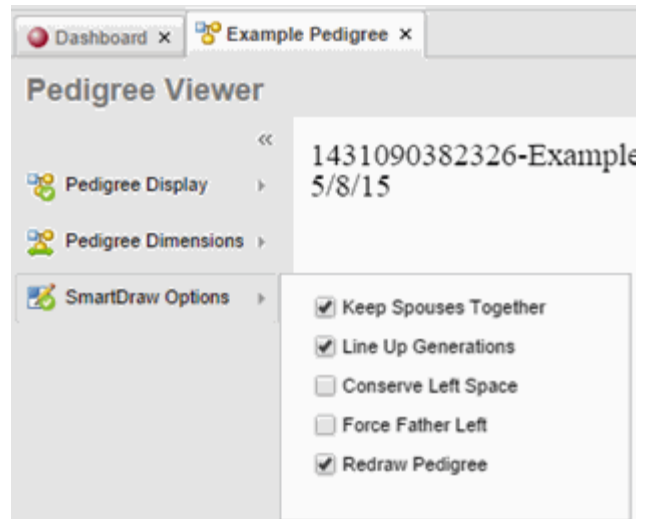
Pedigree Dimensions Options



Pedigree Dimensions Descriptions

Option	Description
Line Width	The width of the relationship lines and icon borders used in the pedigree.
Scale	Size of the pedigree, zoom level from 0 to 800%. 100 is the default – values below this will shrink the pedigree while values larger will increase the size.
Icon Size	The size of the icons measured in pixels that represent individuals in a pedigree. The Square Icons option locks icon height and width to identical values.
Sibling Line Height	The distance (in pixels) of the sibling relationship line from the top of the icons
Y-Subtext Spacing	The distance (in pixels) from the bottom of the individual icon to the top of the first line of subtext
Individual Space	This is the area within the pedigree (height then width in pixels) that is allocated to each individual, including the icon, subtext and sibling relationship line
Grid Space	The height then width values (in pixels) of the background alignment grid. Larger values yield larger overall grid spaces and equal height/width values yield square grid spaces.

Pedigree SmartDraw Options

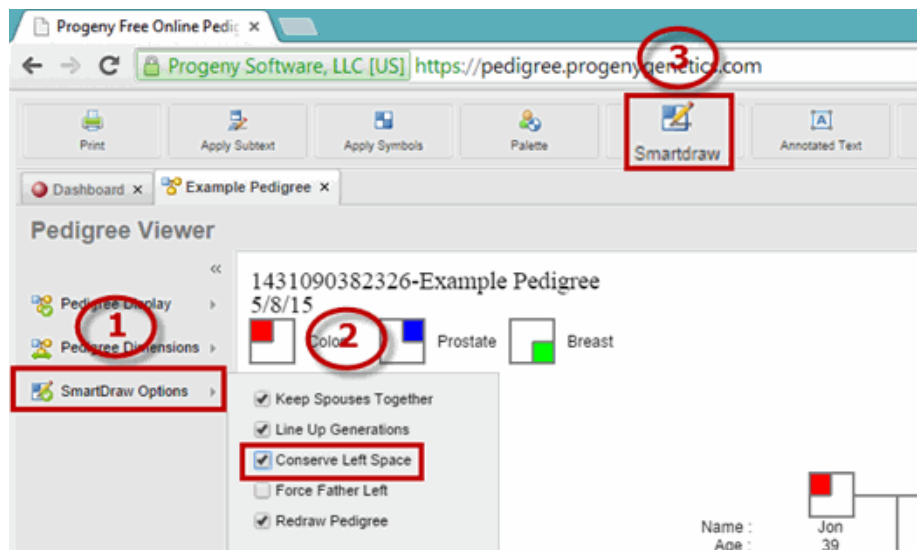


Smart Draw Descriptions

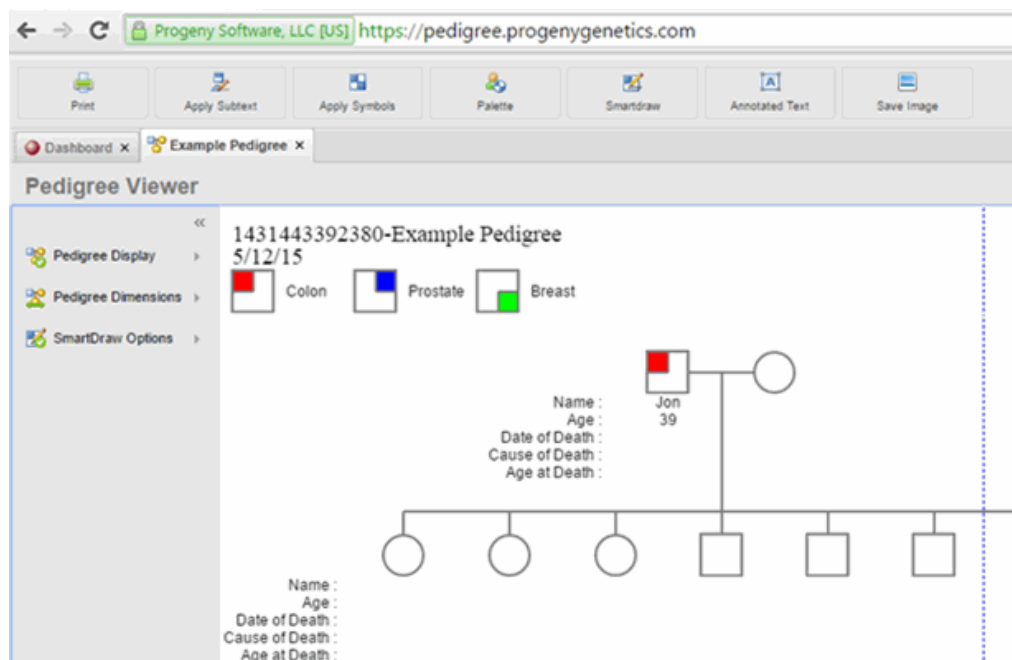
Option	Description
Keep Spouses together	Keep spouse pairs as close to each other as possible.
Line Up Generations	Aligns all individuals of the same generation along a single horizontal plane.
Converse Left Space	Moves the pedigree as far to the left as possible.
Force Father Left	The Male member of a spouse pair will <u>always</u> be positioned to the left of the Female
Redraw Pedigree	SmartDraw by default will automatically adjust the position of an individual to place them in the ideal location within the pedigree. This ideal location is in relation to both the individual's current position and the positions of other surrounding individuals. The Redraw Pedigree option will force SmartDraw to disregard the existing positions of all individuals on the pedigree and completely rebuild the pedigree from zero.

To Apply Smart Draw Settings

1. Open the **Smart Draw Options** menu.
2. Configure as needed (**Conserve Left Space** in this example).
3. Click the **SmartDraw** button to apply the new settings. →

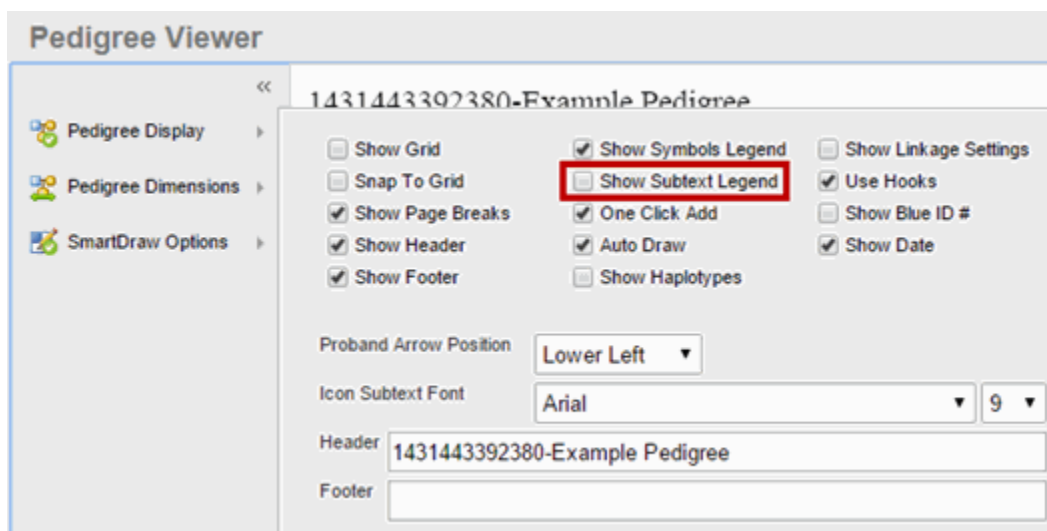


4. The pedigree will automatically redraw according to the new settings:

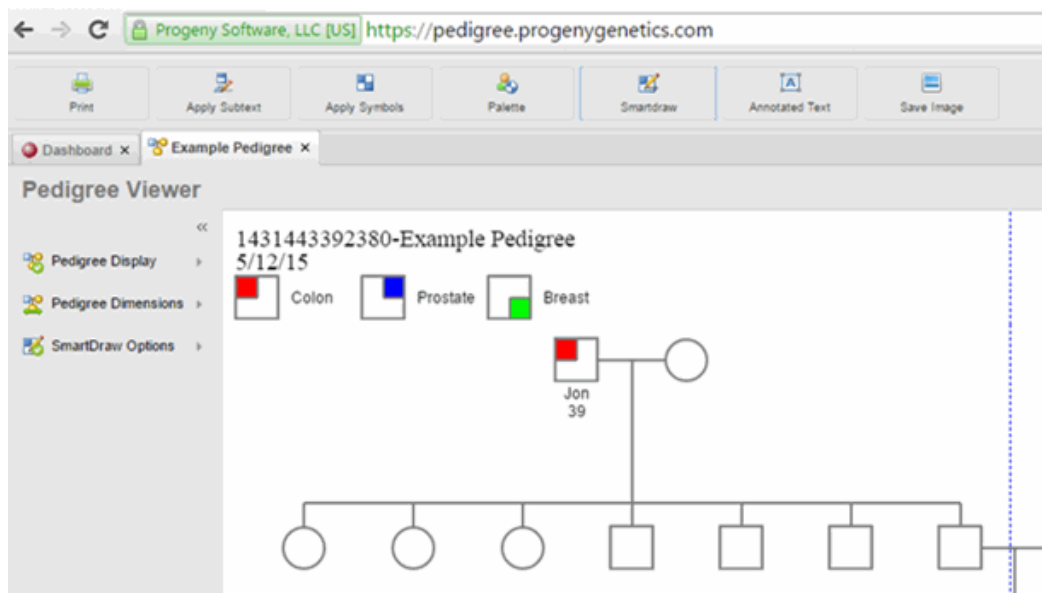


5. Edit other settings to condense the pedigree display. For example remove the subtext legend:

- a. Hover mouse over the Pedigree Display menu.
- b. Uncheck the **Show Subtext Legend** box:

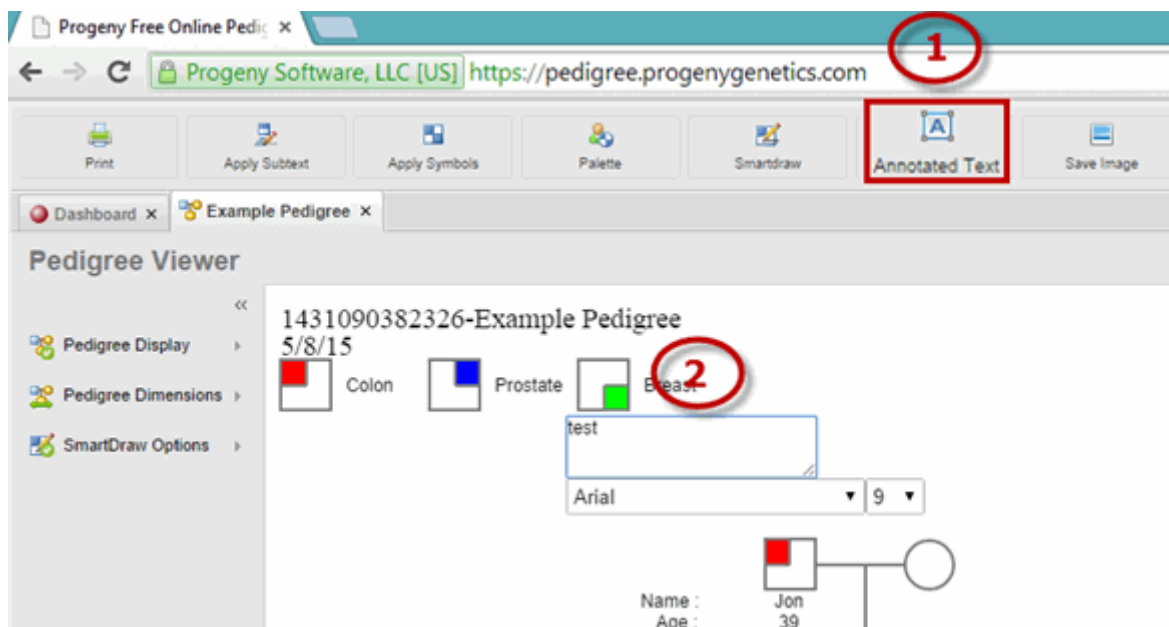


- c. The pedigree will automatically redraw according to the new settings:



To Apply Annotated Text

1. Select the **Annotated Text** Button and the text dialog box opens.
2. Input the text to appear on the pedigree. When finished click outside the dialog box to close it:



3. Annotated text appears as "test" on pedigree:

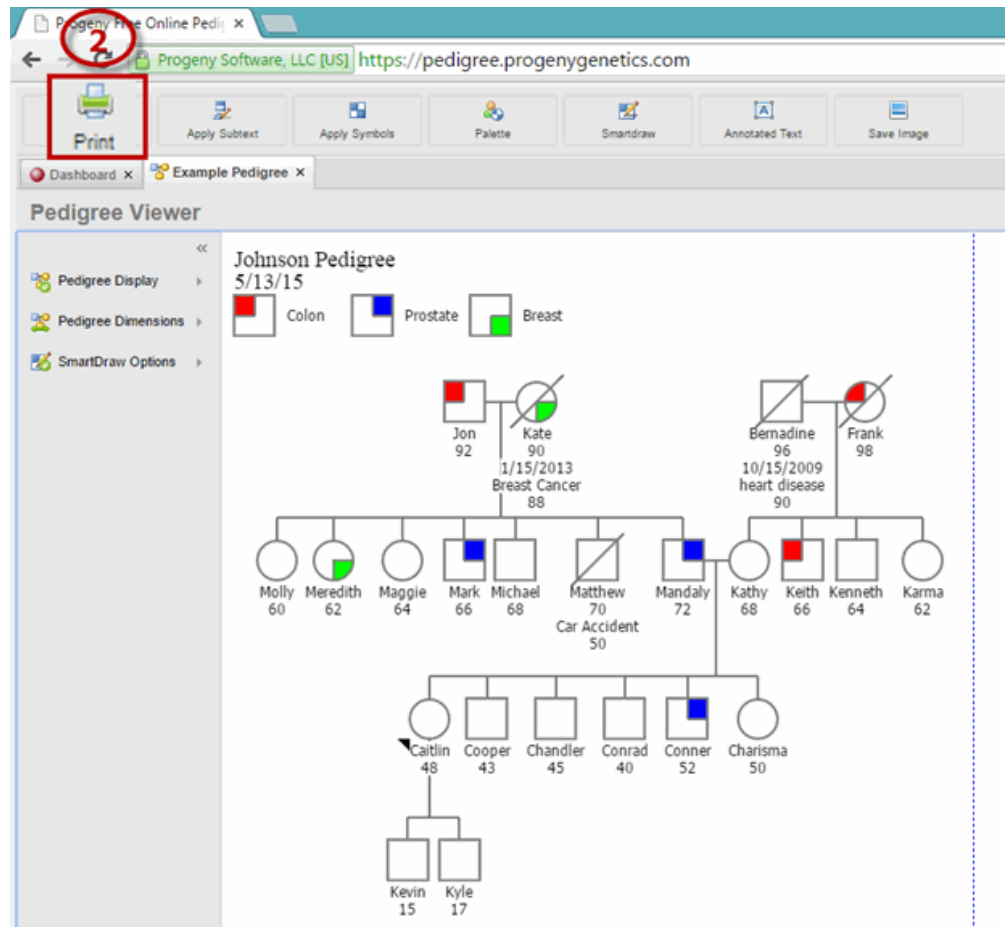


Printing the Pedigree

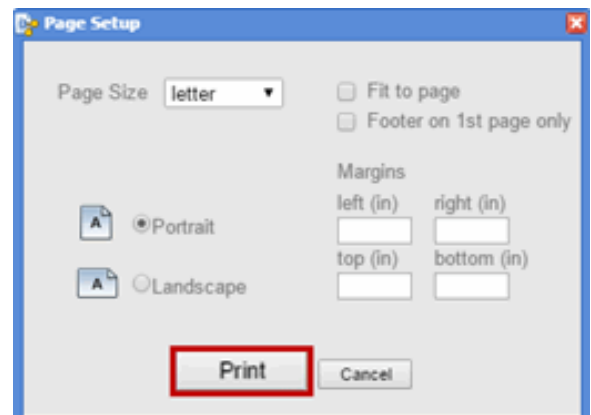
The Progeny Free Online Pedigree Drawing tool does not allow users to save in-progress pedigree for later use; once the pedigree is built users have the option of printing the pedigree or saving it as an image file.

To Print a Pedigree

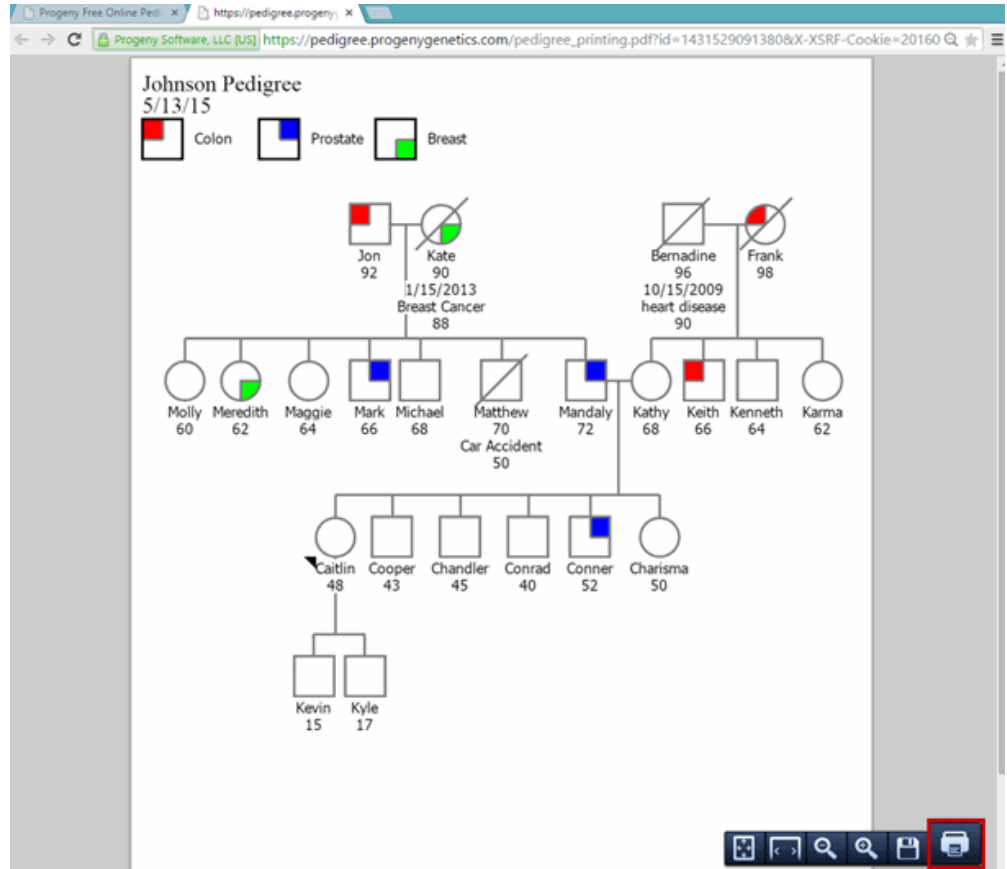
1. After using the Pedigree Display, Pedigree Dimensions and SmartDraw Options to condense the pedigree to its desired size the pedigree can be printed (this will print what is within the page breaks).
2. Select **Print**. →



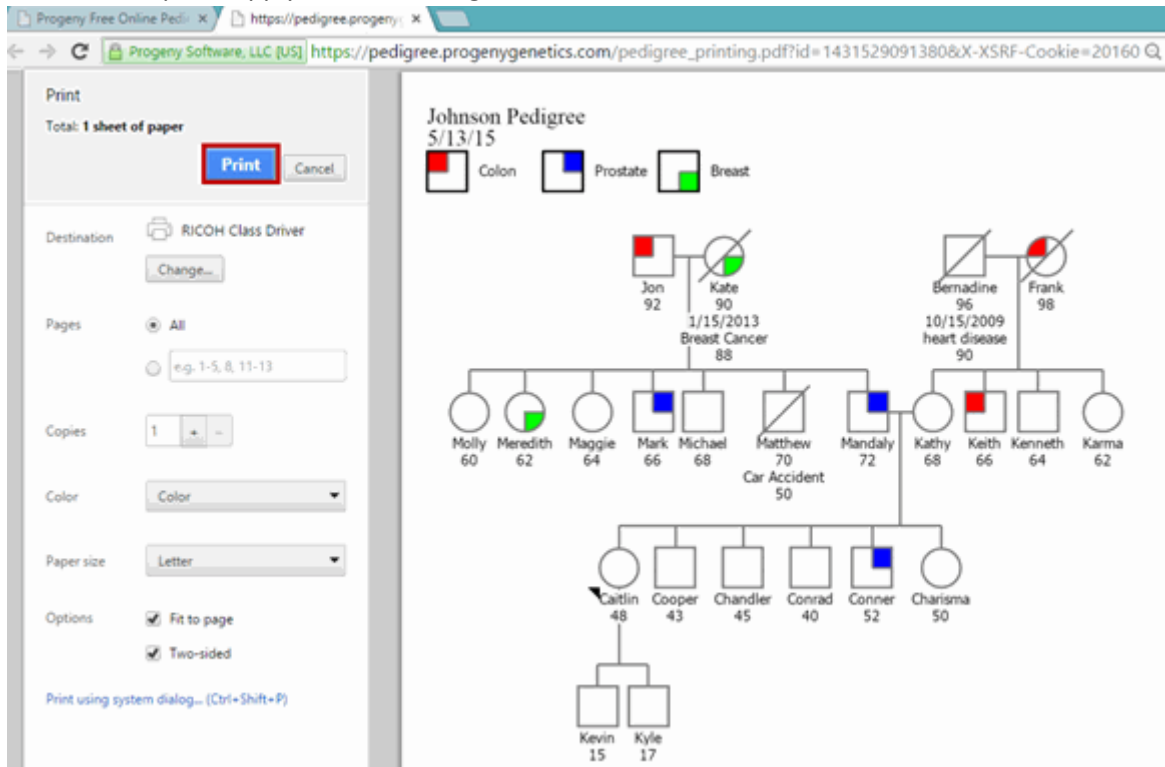
3. The Page Setup dialog box opens, modify as needed and click **Print** (select Fit to page and the pedigree will expand or shrink to fit to the page breaks). →



- The Page Setup renders the pedigree as a PDF natively within the browser. The screenshot here is the fully-rendered PDF file that can be printed or saved to disk. Select the **Print** icon (on the bottom right). →



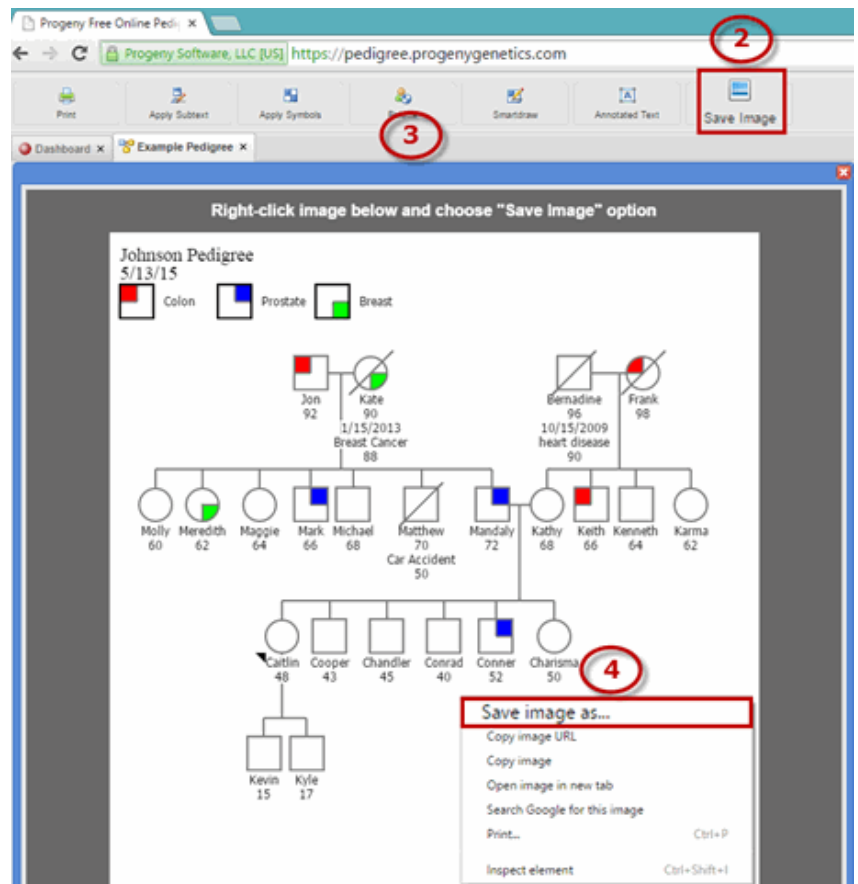
- The Print window opens, apply desired settings and select **Print**:



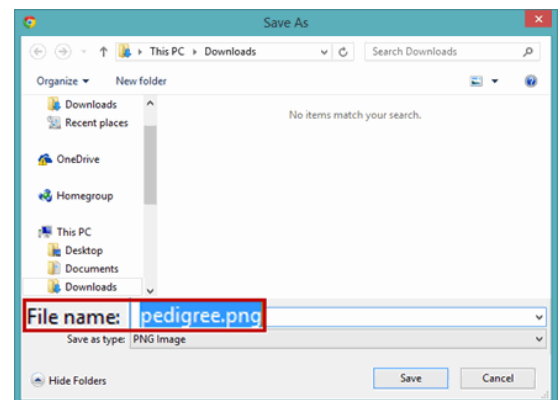
Saving the Pedigree as an Image

To Save a Pedigree

1. After using the Pedigree Display, Pedigree Dimensions and SmartDraw Options to condense the pedigree to its desired size the pedigree can be saved.
2. Select **Save Image**.
3. The image preview window opens.
4. Right-click the image and choose the "Save Image as" option. →



5. The Save As dialog box opens and a default image name is populated. Select the location to save the file and make note. In the file name change to the desired pedigree name. Progeny will save the pedigree image as .png by default. →



6. If a jpg is preferred append .jpg to the end of the file name to save as a jpg image file. →

