

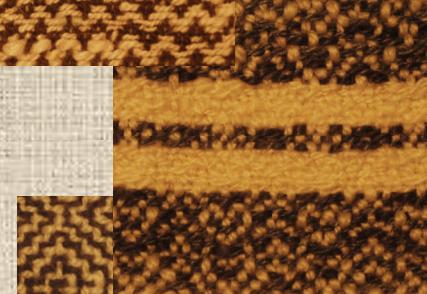
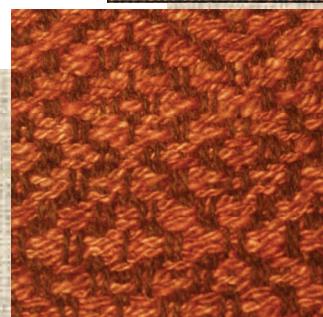
Warp & Weave *Simple Twills*



Exhibit Purpose

This exhibit is being developed to document basic weave structures. These exhibit pages will document existing collections. They are also designed to be easily expanded as more weave structures are added. The documentation and publication of these exhibit pages will be of use to textile historians and hobbyists alike. By adapting and changing different components of the display, weavers will use the information to create their own designs. Historians will compare structures, fibers and sequences with that of historical textiles to identify simple twill drafts.

Home Page: Using Simple Pages and Posters plug-ins for Omeka, the homepage for Warp&Weave *Simple Twills* will consist of photographs (thumbnails) of simple weave structures in a collage format. One can identify and/or browse the exhibit pages by hovering and/or clicking on the individual weave draft thumbnails or on the links in the banner across the top of the homepage.



DIG 540 Final Project

Fall 2015

Diane Hoppe

Omeka Plug-Ins:

Omeka supplies many usable plug-ins that will help create an attractive and informative site. Omeka Plug-ins that will be utilized for this site will include:

Exhibit Builder: Each of the different warp drafts will have its own exhibit showing a variety of designs that are possible with different sequence combinations.

Posters and Simple Pages: These will be used to create the Home Page, and the new add-on plug-in pages

Contribution: This plug-in will be for viewers to use the exhibit data for their own creations. They will be able to submit for upload their own weaving projects into the exhibit pages.

Specialized Plug-in needs:

Omeka does not offer specialized plug-ins that accommodate the data input necessary for this project.

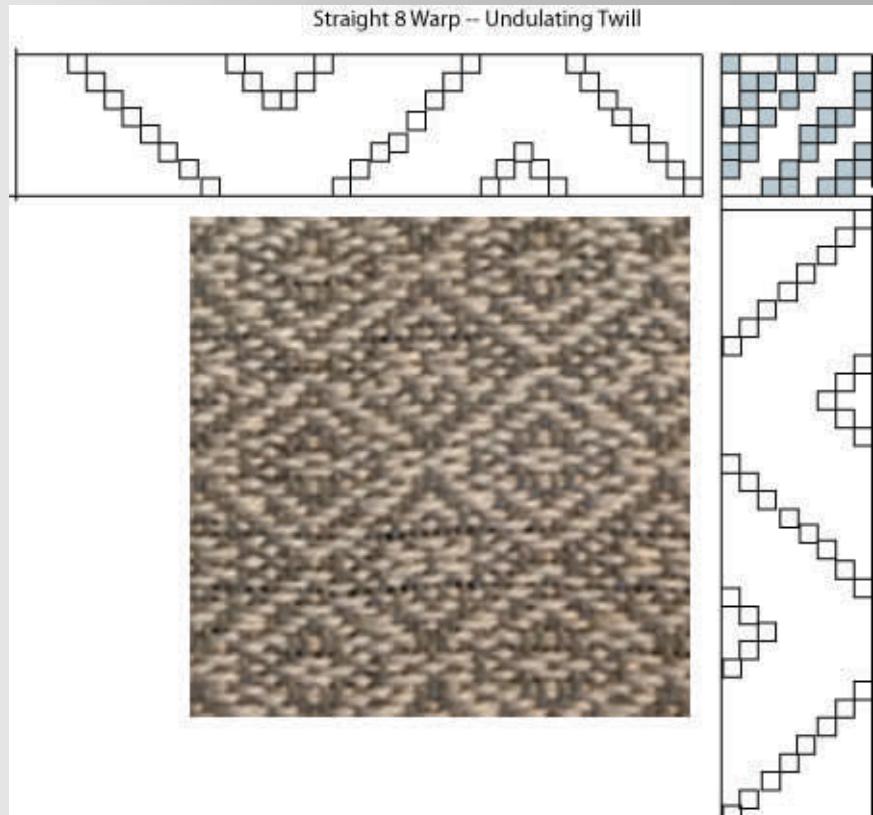
Weaving data and charts require unique applications.

Weavegraph Plug-In:

The design of the Weavegraph plug-in includes weave photo or diagrams and graphs to document the sequences of different weave combinations. Different sequence combinations create different weave structures. The information included in each Weavegraph will show subtle differences when compared with others in the collection.

Details: This Weavegraph plug-in allows for the documenting of the sequences of warp, tie-up, and treadling to create each weave design. It also shows what that combination should look like with either a photograph or diagram. The *warp drafting sequence* is charted across the top of the photo or diagram. The *tie-up* chart is in the top right corner. And, vertically along the right side of the diagram or photo is the *treadling sequence* chart.

The information contained in each of these documents shares sufficient information for identification or replication of the design. Some programs alter the location of the components(left,right, up, down...); however this arrangement is the most universally used. I have created weavegraph png documents using Illustrator and Photoshop and saved images as png. I will enter it into a php document for inclusion in the Omeka pages.



Options: There are many existing computer programs that can aid in the creation of this type of weave planning diagram. The WIF (Weave Information File) format is the most commonly used for creating, planning, and documenting weave structures. Many programs have been developed using WIF, each has different approaches to its use and/or specialize in unique weave patterning. It is a comprehensive file format but is proprietary and expensive. If I were to follow through with this project, I would purchase the program because it is easy to use and has a cleaner appearance.

*The WIF files can be accessed here:
<http://www.mhsoft.com/wif/wif1-1.txt>*

Weave Data Plug-In

Documenting weave structures requires different documentation criteria than other collection items or exhibits. In order to document a woven item it is important to understand the unique components are included in its creation. These include: weave structure, design name(s), number of threads used (warp and/or weft) per inch, fiber(s) used, and if at all possible what type of loom was used and the number of harnesses. The creation of this plug-in makes it easy to input and adjust for each different design.

Details: My Weave Metadata plug-in includes simple html and php forms where this information can be input. The information will be generated from and stored in a relational MySQL/PHP database (heroncro_weavedata). The metadata information is specific to each Weavegraph sample.

About Weaving Drafts Included in this Exhibit

Plain and basic twill weave drafts can be used to create any number of designs when you utilize different colors and/or fibers.

Draft Information

Draft Name:

Loom Type

Rigid Heddle Counterbalance Jack Countermarche Dobby

Number of Harnesses:

Warping Sequence:

Treadling Sequence:

Number of Warp Ends per inch (EPI):

Warp Fiber:

Weft Fiber:

Comments

```
Basic point twill draft with tread as wrought.
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Buttons

Exhibits to be included in initial Project

The following exhibits show the versatility of simple drafting sequences.

It is not to be considered definitive. More examples will be added as they become available. If you would like to submit your own version of these or other basic twill drafts for 4, 8, or 16 shafts, you may do so on the Contributor Plug-in page.

Exhibit 1: Plain Weave 2, 4, 8 Harness



Exhibit 2:

Straight Draft 4 Harness

- a. Straight Treadle
- b. Point Treadle

Straight Draft 8 Harness

- a. Undulating Twill
- b. Point

Exhibit 3:

Point Draft 4 Harness

- a. Straight Treadle
- b. Point Treadle

Point Draft 8 Harness

- a. Straight Treadle
- b. Point Treadle

Exhibit 4:

M & W 4 Harness

- a. M&W Treadle
- b. Straight Treadle

Exhibit 5:

Birdseye 8 Harness

- a. Birdseye Treadle
- b. Straight



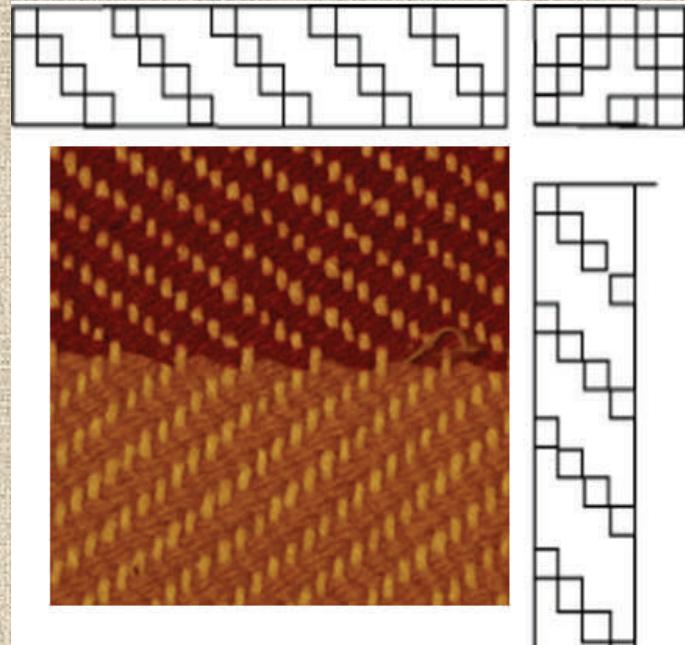


Exhibit 2: Straight Twill

About Weaving Drafts Included in this Exhibit

Plain and basic twill weave drafts can be used to create any number of designs when you utilize different colors and/or fibers.

Draft Information

Draft Name:

Loom Type:

Rigid Heddle Counterbalance Jack Countermarche Dobby

Number of Harnesses:

Warping Sequence:

Treadling Sequence:

Number of Warp Ends per inch (EPI):

Warp Fiber:

Weft Fiber:

Comments:

```
Basic point twill draft with tread as wrought.
```

Example page 2

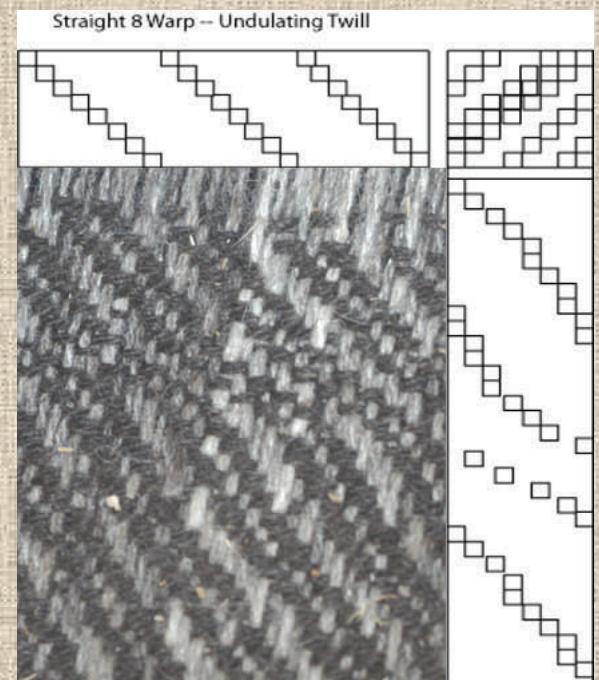


Exhibit 2: Undulating Straight Twill

About Weaving Drafts Included in this Exhibit

Plain and basic twill weave drafts can be used to create any number of designs when you utilize different colors and/or fibers.

Draft Information
Draft Name

Loom Type

Rigid Heddle Counterbalance Jack Countermarche Dobby

Number of Harnesses **8**

Warping Sequence

Treadling Sequence

Number of Warp Ends per inch (EPI) **12**

Warp Fiber

Weft Fiber

Comments

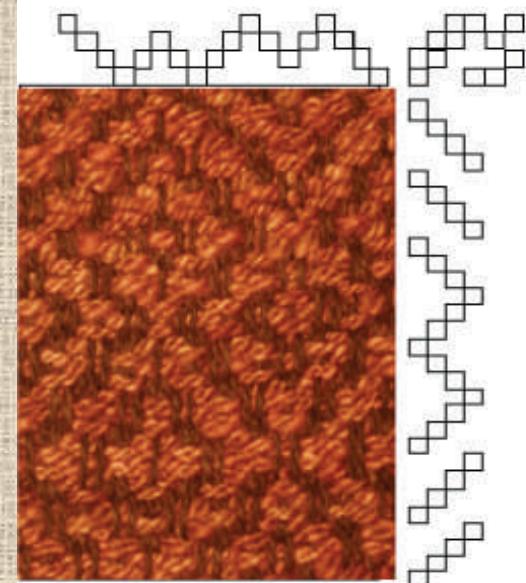


Exhibit 4: M&W

About Weaving Drafts Included in this Exhibit

Plain and basic twill weave drafts can be used to create any number of designs when you utilize different colors and/or fibers.

Draft Information

Draft Name:

Loom Type:

Rigid Heddle Counterbalance Jack Countermarche Dobby

Number of Harnesses:

Warping Sequence:

Treading Sequence:

Number of Warp Ends per inch (EPI):

Warp Fiber:

Weft Fiber:

Comments:

Brown wool warp M&W draft with Rosepath Adobe weft Treadle

Example page 4

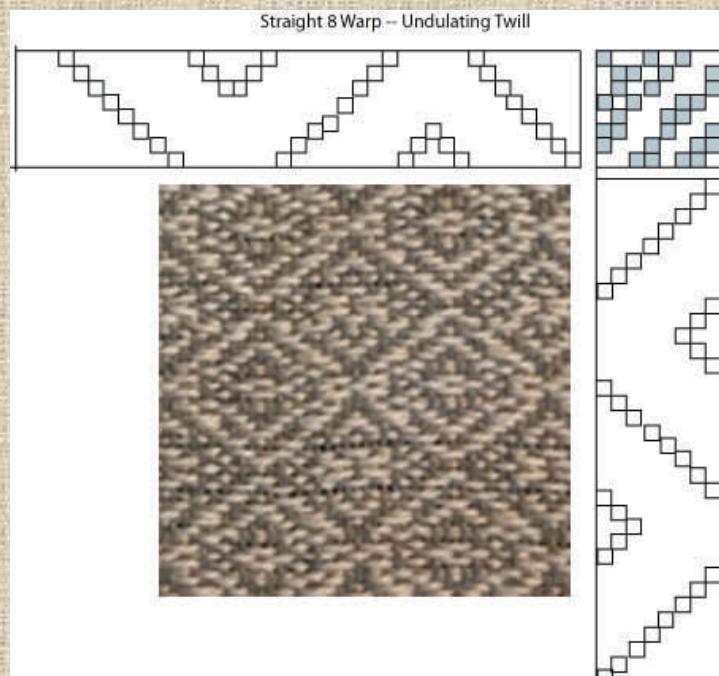


Exhibit 5: Birdseye

About Weaving Drafts Included in this Exhibit

Plain and basic twill weave drafts can be used to create any number of designs when you utilize different colors and/or fibers.

Draft Information
Draft Name

Loom Type

Rigid Heddle Counterbalance Jack Countermarche Dobby

Number of Harnesses **8**

Warping Sequence

Treadling Sequence

Number of Warp Ends per inch (EPI) **12**

Warp Fiber

Weft Fiber

Comments

Glossary

Weaving – The process of making cloth by passing crosswise threads over/under lengthwise threads

Warp – Lengthwise threads that are taught. Warp is threaded through heddles from the back beam on a loom to the cloth (front) beam. The number of warp threads per inch is indicated by the term: EPI (ends per inch)

Weft – The crosswise threads that pass over and under the warp threads. Measuring the warp threading is: PPI (picks per inch)

Harnesses or Shafts – Frames that contain many heddles in different sequences or drafts. Most looms have harnesses in multiples of 2, (example: 2, 4, 8, 16, and so on). The most common for new weavers is 4 or 8.

Heddles – Strings or thin metal rods strung on the harnesses that are slotted in the middle lengthwise. Their purpose is to lift the threads in different sequences. Example: if the threading sequence has all the #1 threads going through the heddles on the #1 harness all of the #2 threads pass through the #2 heddles on the #2 harness ... Then when you raise the #1 harness (shaft), all of the #1 threads will rise, and the #2 threads will lower. When you raise the #2 harness, all of the #2 threads will rise and the #1 threads will lower...and so on.

Tie-up: Connecting a harness to a treadle. More than one harness can be tied up to a treadle. The tie-up sequence is a major factor in altering designs.

Treadle: A peddle that connects to one or more harnesses. On a 4 harness loom, there must be at least 4 treadles, but could have many more. Most have 6 treadles; 4 for the design, and 2 for a plain weave.

Treadling Sequence = The sequence that you depress each treadle. This action sequence creates the patterns you see created by the weft going between the raised and lowered warp threads.