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| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | | Fragilaria Kingdom: Protista  Phylum: Heterokontophyta  Class: Bacillariophyceae  Order:  Family:  Genus:  Species: | Image captured with Motic 2300 - 400x - 11/2009 | |  | | | General Information:  Many different types of algae can be found in the creek. Yellow green / golden brown algae are common. Perhaps the most prolific and most important member of this phyla is a group of algae commonly called diatoms. They get this name due to the fact that their cell wall is composed of two parts. This group acts as the number one producer in the food chain of most aquatic systems. They alone are responsible for about 50% of the worlds atmospheric oxygen. Many species form chains of cells creating a diatom colony. They can be found floating on the surface, attached to rocks, and attached to other aquatic producers. Storing food products as oil helps many species float and remain exposed to maximum light intensity (two oil vacuoles can be seen in the specimen above). As light becomes more intense ideal conditions exist for rapid blooms of diatoms which can change the color of the creek water to green, yellow green, or golden brown. The colonial specimen above was photographed at 400x using a flex cam. The cells that make up the colony have the tendency to slide over each others surface elongating the colony in one direction and then rversing the sliding action to elogate it in the other. It seems apparent that light intensity impacts this activity. | | |  | | | Image captured with flexcan - 400x |  |  |  | | --- | | Copyright © 2008 Amador Valley High. All Rights Reserved. Reproduction in whole or in part in any form or medium without express written permission of Amador Valley is prohibited. | |