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| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | | Coccones Kingdom: Protista (Chromalveolata)  Phylum: Heterokontophyta  Class: Bacillariophyceae  Order: Centrales  Family:  Genus:  Species: | Image captured with the Motic 2300 - 100x - 11/2009 | |  | | | General Information:  Many different types of algae can be found in the creek. 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. The cell wall of most species of diatom is composed of silica dioxide which causes them to have a glass like appearance under the microscope. 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. 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. Coccones is an epiphytic species which means that it grows attached to other algae or aquatic plants. Their circular shape makes their identification fairly easy. They are most abundant in the late summer and fall when conditions for filamentous algae becomes increasingly less desirable. They become so abundant on filamentous green algae that it causes it to appear more of a brown color than bright green. It may be that declining conditions impact the green alage's ability to establish conditions which inhibit the attachment of these diatoms. | | |  | | | Image captured with the Motic 2300 - 400x - 11/2009 |  |  |  | | --- | | 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. | |