

## Neomysis/Zooplankton Abundance

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Important zooplankton species and mysids in the upper estuary showed little change between 1996 and 1997 and hence no change in long-term trends. The abundance of the estuarine rotifer, *Synchaeta bicornis*, as well as all rotifer species showed only slight changes in 1997 compared to 1996 (Figures 1 and 2). Among copepods, abundance of *Eurytemora affinis* and the introduced *Sinocalanus doerrii* was almost unchanged in 1997. The introduced *Pseudodiaptomus forbesi*, showed a small decline (Figure 3). The marine *Acartia*, which was present only at the most downstream stations, showed no improvement from the very low levels it has had in recent years (Figure 4). Cladocerans, *Dipatomus*, and *Cyclops*, all remained at low levels of abundance (Figures 5, 6, and 7).

The native mysid, *Neomysis mercedis*, was rare and was found mainly in the Suisun Marsh (Figure 8). The introduced *Acanthomysis bowmani* showed an increase in abundance and was found for the first time in the San Joaquin River at Stockton (Figure 8). Its appeared there in summer when *Neomysis* has historically been absent from the eastern delta. Since its detection in 1992 *Acanthomysis bowmani* has become more abundant and has progressively extended its range upstream from Suisun Bay into the delta.

The last 2 or 3 years have been a period of stability for the above species compared to the rather large oscillations that have characterized abundance trends in the past.

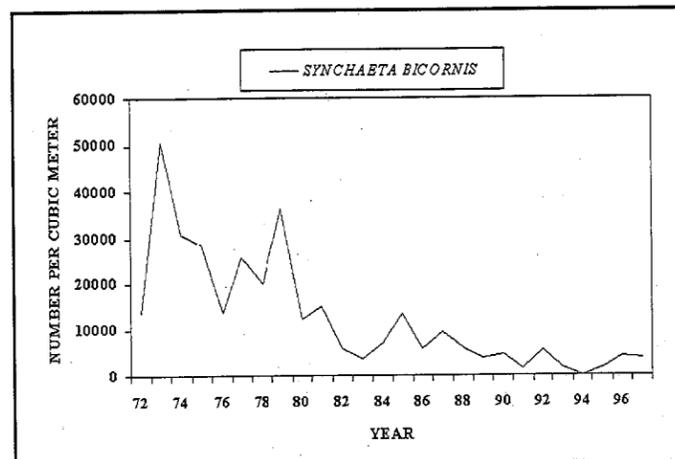


Figure 1. Mean March-November Abundance of *Synchaeta bicornis* from 1972 to 1997

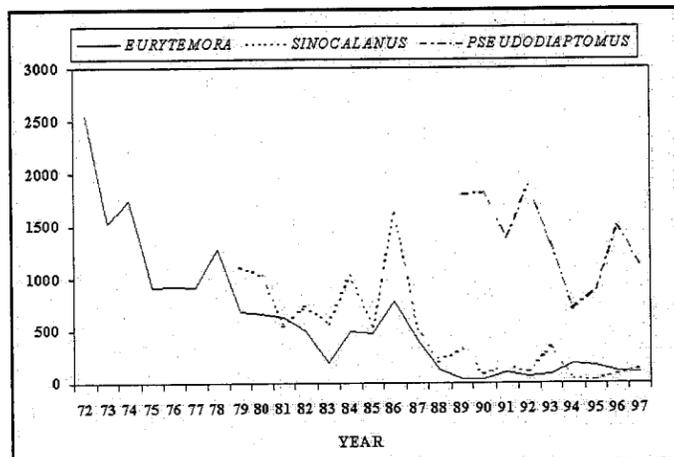


Figure 3. Mean March-November Abundance of *Eurytemora affinis*, *Sinocalanus doerrii*, and *Pseudodiaptomus forbesi* from 1972 to 1997

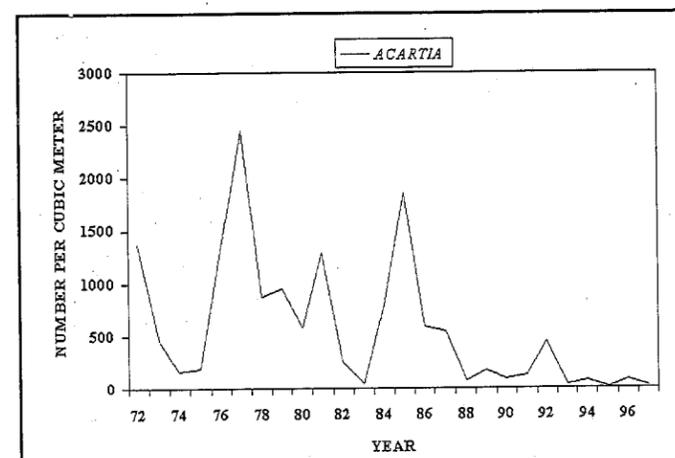


Figure 2. Mean March-November Abundance of All Rotifer Species (except *S. bicornis*) from 1972 to 1997

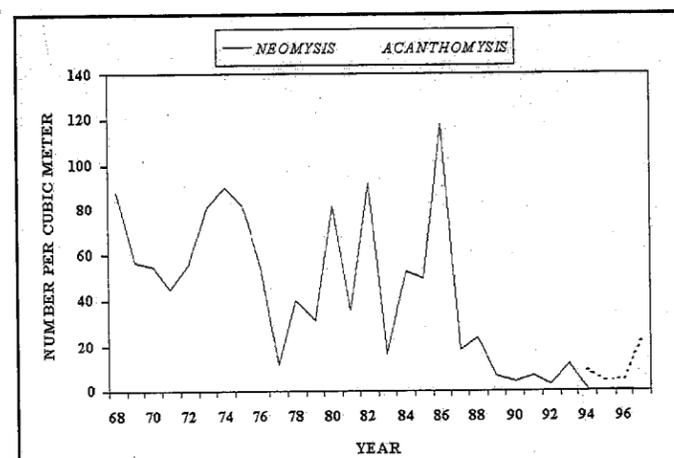


Figure 4. Mean March-November Abundance of *Acartia* Species from 1972 to 1997

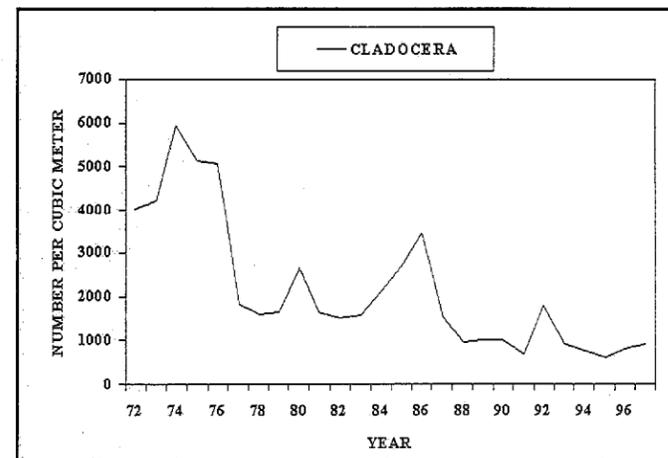


Figure 5. Mean March-November Abundance of All Cladoceran Species from 1972 to 1997

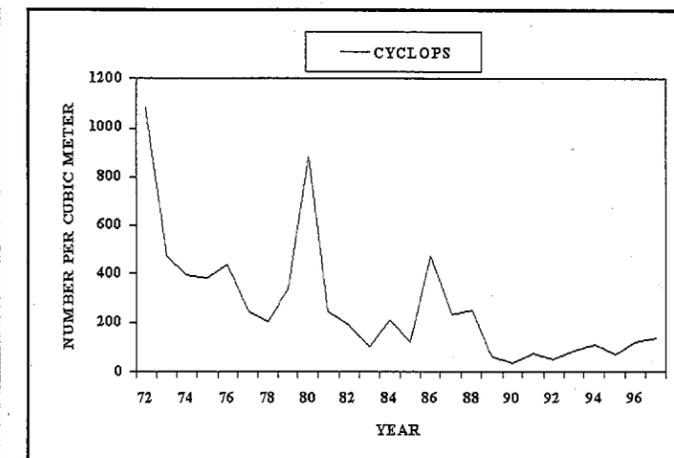


Figure 7. Mean March-November Abundance of all *Cyclops* Species from 1972 to 1997

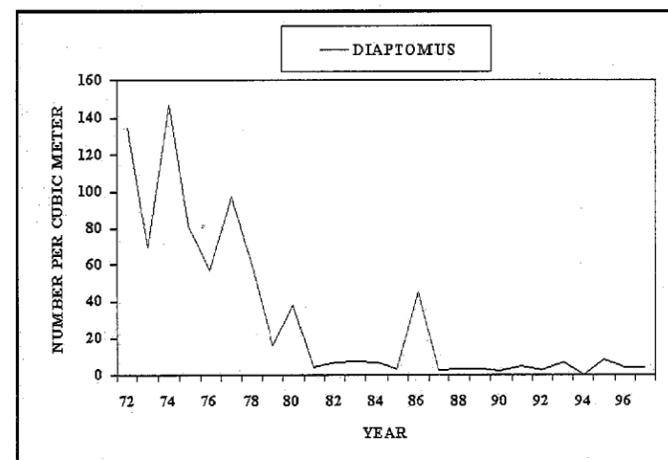


Figure 6. Mean March-November Abundance of all *Diaptomus* Species from 1972 to 1997

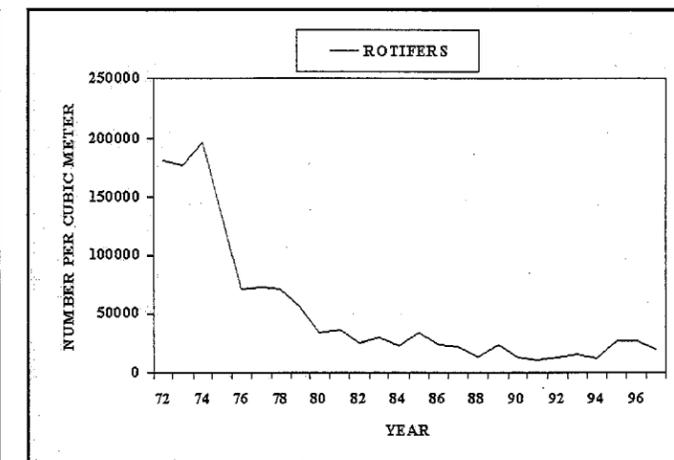


Figure 8. Mean March-November Abundance of *Neomysis mercedis* and *Acanthomysis bowmani* from 1972 to 1997

### Chuck Armor Appointed IEP Program Manager

Chuck Armor, a career Fish and Game biologist, has been appointed to replace Pat Coulsten as the Interagency Ecological Program Manager. His appointment was recommended by the IEP Coordinator and became official on April 1, 1998.

Chuck started his career in Long Beach with the Department of Fish and Game as a water quality biologist. In 1980, he transferred to the Bay/Delta Division in Stockton and worked on the San Francisco Bay/Delta Outflow Study. He has moved up the chain of command of the "Bay Study" until he reached the Senior Biologist position in approximately 1990. Most recently, Chuck has played a leadership/coordination role in the IEP "Real Time" program and the Management Team. He has demonstrated leadership, analytical and logistical skills, which will serve him well in this new assignment. Chuck is enthusiastic about his appointment and is already taking steps to implement his vision for the position.