Announcing the Joint Meeting of the

AMERICAN SOCIETY of PARASITOLOGISTS
(75th annual meeting)

&

SOCIETY of PROTOZOOLOGISTS
(53th annual meeting)

Caribe Hilton Hotel, San Juan, Puerto Rico
June 24–28, 2000

INFORMATION and REGISTRATION

San Gerónimo Foyer†

Saturday, June 24th	10:00 a.m.–5:00 p.m.
Sunday, June 25th	8:00 a.m.–5:00 p.m.
Monday, June 26th	8:00 a.m.–Noon

† Items for the Auction may be delivered to this location anytime before noon on Sunday, June 25th.

new host species. Consequently, if this small group of specialists is present in most host species and distributed with them to new localities, they will increase similarity between localities, which, in turn, increases predictability. In contrast, in the very old helminth faunas of South American cichlids, the degree of differentiation among specialists is so high that almost each host species will have their own specialists, with a corresponding drop in similarity between localities and predictability.

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The Structuring Process of the Macroparasite Communities of Native and Exotic Cichlid Fishes in Southeastern México. I. JIMENEZ-GARCIA* and V.M. VIDAL-MARTINEZ

The structuring process of macroparasite communities was studied in sentinel populations of *Cichlasoma urophthalmus* (a native cichlid) and *Oreochromis niloticus* (an exotic cichlid). Four floating cages were introduced in a gravel quarry locate 30 km north of Mérida, Yucatán, México. Data on macroparasites communities have been obtained at infracommunity level on a monthly basis for both caged and wild *C. urophthalmus* and *O. niloticus* since September 1999. The macroparasite fauna of wild *C. urophthalmus* was formed by 10 species (*Sciadicleithrum mexicanum*, *Echinochasmus leopoldinae*, *Phagicola nana*, *Oligogonotylus manteri* [larvae and adults], *Crassicutis cichlasomae*, *Posthodiplostomum minimum*, *Mexiconema cichlasomae*, *Contracaecum* sp., *Falcaustra* sp. and *Argulus mexicanum*). Six of these species were highly specific, but also frequent (prevalence (%)= 40–100%) and abundant (Abundance (Ab.) = 3–65 worms/fish). Wild *Oreochromis niloticus* were infected only by *Contracaecum* sp. (% = 50, Ab. = 1 ± 0.8). After three months of the experiment, *C. urophthalmus* became infected by six macroparasite species. Three of these species are highly host specific: *S. mexicanum* (% = 90, Ab.= 27 ± 22); *O. manteri*, both metacercariae (% = 15, Ab. = 0.15 ± 3.5) and adults (% = 10, Ab. = 0.1 ± 0.25); and *C. cichlasomae* (% = 3, Ab. = 0.1 ± 0.25). Additionally, the generalists *Contracaecum* sp. was present (% = 3%, Ab. = 0.7 ± 4) together with *Argulus mexicanum* (% = 10%, Ab. = 0.1 ± 0.09), another species of uncertain status, and the monogenean *Cichlidogyrus sclerosus* (% = 4, Ab. 0.04 ± 0.1), a specialist of *O. niloticus*. In the case of *O. niloticus*, they arrived infected with *Cichlidogyrus* sp. to the cages. After the three months period, these fish retained their specialists: *C. sclerosus* (% = 65, Ab. = 0.75 ± 1), *C. dossoui* (% = 30%, Ab. = 0.6 ± 2.5) and *C. tilapiae* (% = 7, Ab. = 0.06 ± 0.01). They also acquired *O. manteri* (% = 20%, Ab. = 0.3 ± 1.2), a specialist of native cichlids, and *Saccocoelioides* sp. (% = 10, Ab. = 0.1 ± 0.3), a species of uncertain status. The results suggest that highly specific macroparasite with direct transmission reached first-caged *C. urophthalmus*, but more importantly, that both cichlid species are exchanging specialists macroparasites. The rest of the species (generalists and those of uncertain status) are drawn randomly from the pool of macroparasite species available in the quarry.

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Parasite Assemblage in a Wild Population of the African Clawed Frog, *Xenopus laevis*, Introduced to Southern California. B.I. KUPERMAN*, V.E. MATEY, R.N. FISHER and E.L. ERVIN

Wild populations of African clawed frog, *Xenopus laevis,* have been established in several California counties, including San Diego, for more than 30 years. Favorable environmental conditions provide for successful reproduction and dispersal of this frog in ponds and rivers of southern California. In Africa *X. laevis* is known as a host for a rich assemblage of parasites with more than 25 genera from seven invertebrate groups. Our goal was to identify the parasite fauna of the African frog from San Diego County. Sampling was conducted in two ponds from the Rancho Jamul system. Full parasitological examinations were conducted on 21 adult *X. laevis* in January–June, 1999. Parasites collected were studied under light microscope and scanning electron microscope for precise identification. The recent parasite assemblage of *X. laevis* was represented by eight genera from four groups. All frog examined were highly infected by parasitic protozoans. Three species of Protozoa (ciliates *Nyctotherus sp., Balantidium xenopodis* and *Protoopalina xenopodus*) inhabited the rectum. Flagellates *Cryptobia sp.* were revealed in the blood. Monogenea were represented by two species—*Protopolystoma xenopodis* in urine bladder (prevalence 23.8%, mean intensity 4.2) and *Gyrdycotylus gallieni* in stomach (prevalence 19.0%, mean intensity 8.7). Cestoda *Cephalochlamys namaquensis* were found in the intestine (prevalence 68%, mean intensity 17.4).

Nematoda *Camallanus xenopodis* were harbored in the frog intestine and body cavity (prevalence 14.2%, mean intensity 2.0). All parasite species found in *X. laevis* from San Diego County were the same as found in the frogs in Africa. Only Digenea, Hirudinea and Acari were not revealed in frogs from San Diego County. *X. laevis* brought to California their parasites, including some with direct and indirect life cycles that survived and thrived in this new environment. Our next tasks are two-fold: to continue the parasitological assessment and compare parasites of African and California native frogs from the same habitats.

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Seasonal Variation of Digeneans in the Snail *Pyrgophorus coronatus* in Two Localities of Yucatán, México. A. TERESA ŚABAS FLORES DÍAZ DE LEÓN* and M. LEOPOLDINA AGUIRRE-MACEDO

The changes in the prevalence of 12 species of trematodes in the snail *P. coronatus* were studied over a two-year period (September 1997–August 1999) in Mitza and Celestun, Yucatán. Five species of digeneans—*Crassicutis cichlasomae*, *Oligogonotylus manteri*, *Echinochasmus leopoldinae*, *Phagicola nana* and *Xiphidiocercariae* sp. 1—were found in both localities. Additionally, *Saccocoeloides* sp., *Xiphidiocercariae* sp 2., four unidentified species of the family Heterophyidae, and one species of the family Microphallidae were found in Celestun. The species most frequent in Mitza were *C. cichlasomae* and *E. leopoldinae*, while in Celestun *Saccocoeloides* sp., *Ph. nana* and *O. manteri* were. The most frequent species in both localities showed annual patterns in their infections parameters.

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Parasite Fauna of the American Oyster, *Crassostrea virginica*, in the Gulf of México. M. LEOPOLDINA AGUIRRE-MACEDO* and KARLA ROMAN-MAGAÑA

Crassostrea virginica from eight localities along the Gulf of Mexico from Tamaulipas to Campeche, Mexico, were examined for protozoan and helminth parasites. Oysters were examined by compression between two glass slides under both light and estereomicroscope. A fragment of gills and anus was cultured in thioglycolate medium for diagnosis of the protozoan *Perkinsus marinus*. Prevalence and abundance were calculated. Two protozoans (*P. marinus* and *Nematopsis* sp.) and three platyhelminthes (*Urastoma cyprinae*, *Proctoeces maculatus* and *Tylocephalum* sp.), and additionally one copepoda probably belonging to the genus Mytilicola were found. None of the parasite species were present in all localities. *Nematopsis* sp and *P. marinus* were present in seven of the eight localities studied with prevalence values between 70% and 100% and 23% and 100%, respectively. Prevalence of all other species at each locality was very variable. Oysters from all localities harbored at least one parasite species, with the maximum number of species in a locality being five. All these species are common parasites of oysters and other bivalves in the Atlantic coast from Canada to México.

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Inbreeding Depression of Nematode Resistance in *Mus domesticus*. SHAWN MEAGHER* and WAYNE K. POTTS

Inbreeding (mating between relatives) has well-documented negative consequences on life-history attributes such as growth rate and juvenile survival. One important correlate of evolutionary fitness that has received little attention in studies of inbreeding depression is host parasite resistance. We examined the naturally acquired parasite loads of house mice *Mus domesticus* living in semi-natural population enclosures to test whether inbreeding reduces parasite resistance in these hosts. Male and female mice derived from brother–sister mating (inbred animals) and non-relative mating (outbred) were released into the same enclosures and allowed to compete with one another for territories and access to mates. After eight months in these competitive conditions, animals were sacrificed and their gut parasite intensities determined. Mice harbored two nematode species, *Syphacia obvelata* and *Aspicularis tetraptera* (collectively "pinworms"). ANOVA was used to test for significant effects of mouse gender, inbreeding level, and their interaction on pinworm infection intensity. All three factors were significant: females had significantly fewer worms than males and outbred mice had significantly fewer worms than inbred mice. Finally, inbreeding had more serious consequences for male than female mice. Inbred females had slightly elevated pinworm intensities, while inbred males displayed intensities that were twice as high as outbred males. These data are consistent with previous findings from this