Resources:

* Hawaiian Coral Reef Ecology (1998, Mutual Publishing), specifically descriptions on pages 94- 103 on corallivory, with emphasis on page 103 which highlights fish bite marks
* Bonaldo and Bellwood, 2011. Coral Reefs. Parrotfish predation on massive Porites on the Great Barrier Reef.
* Bonaldo, Krajewski and Bellwood, 2011. Marine Ecology Progress Series. Relative impact of parrotfish grazing scars on massive Porites corals at Lizard Island, Great Barrier Reef.
* You need to talk to David Bellwood at JCU in Townsville.
* Reinhard Gygi did this 45 years ago. Look up his stuff. He (I think) has pix in his thesis.
  + Gygi was part of the ground-breaking McGill/Edinburgh work on Barbados. I vaguely recall him (or was it someone else?) taking impressions of bite marks and matching them to dentition.
* Danielle Jayewardene's dissertation
* Many students before you have studied corallivory in Hawaiian fishes and I encourage you to take advantage of that wealth of information.  Attached is a paper on Chaetodon multicinctus from my dissertation.  The figure showing the withdrawn polyps also shows empty calices where individual polyps have been removed - characteristic of C.m.  The photos did not translate very well (this was pre-digital photos), but there may be better plates in my dissertation which should be in the Zoology Department office or library at UH. (From Deborah Gochfield)(look at paper attached in her email)
  + Different butterflyfishes make different types of feeding scars.  C. multicintus has a forceps-shaped mouth and plucks out individual polyps below the tentacular ring, allowing them to regenerate.  C. ornatissimus has a larger fleshier mouth that enables them to slurp (as I think of it) up several polyps and the coenosarc in between in a single bite.  Just a couple of distinct examples.
  + Most students focus on whatever is in google scholar but if you're just starting on a new topic, there's a lot to be learned from "the locals".  Ernie Reese is a huge name in butterflyfish corallivory and many of us were his students.  Even though his (and many of our) papers are now considered old, they should not be dismissed - in other words, don't spend time reinventing the wheel.  Assuming you have access to them, look at the theses/dissertations of the following people:  me, Greta Aeby, Randall Kosaki, Darby Irons, Phil Motta, Tom Hourigan, Evelyn Cox, and Tim Tricas (or pick his brain directly).  Some of us worked in areas other than Hawaii, but understanding what has been done before you is always helpful.
  + The reason I recommended the dissertations is that some of them have color plates, photos or additional data that didn't end up in publications.  Phil Motta also wrote a book on butterflyfishes.  It's one of several and rather old now, but I mention it because he studied ecomorphology of butteflyfish feeding - mouthpart shape and function, which translates into what bites look like.  There's also a huge butterflyfish treastise by Burgess (maybe also a UH grad but if so, long before me).  Unless your photogrammetry is much higher resolution than I've seen previously, I'd be surprised if you could see single polyp C. multicinctus bites, though that would be cool.
  + I have photos of corallivore bites, but many are slides that haven't been scanned.  If you're just using them for your identification (and won't use them in slide shows or publications without my permission), I might have a few in digital format.  You might also check out David Gulko's Hawaiian Coral Reef Ecology book.  I don't remember if there are any examples in there, but he used many of my photos and those of my colleagues.  You may just have to go out and watch fish feed (one of my favorite things to do).
* In addition to butterflyfishes, other corallivores in Hawaii include damselfishes (Plectroglyphidodon johnstonianus in particular - Nancy Wheat and I worked on that; I can send you my paper on its energetics if you're interested), blennies (Bruce Carlson studied Exallias brevis - which makes distinctive feeding marks), and parrotfishes (their bites should be obvious).  Others are more omnivorous like pufferfishes and filefishes.
* Possible control of acute outbreaks of a marine fungal pathogen by nominally herbivorous tropical reef fish (Neal et al 2020)
* Fish corallivory on a pocilloporid reef and experimental coral responses to predation
  + Contact Maria del Mar (Diego Lozano Cortes can put me in contact with her if she doesn’t answer)
* From Bruce Carlson - Meanwhile, attached is a paper I wrote in response to another paper describing a new "coral disease", which I pointed out was simply feeding scars produced by Exallias brevis.  Also, I have written much more on the Exallias scars in my doctoral thesis which you should be able to find in the Zoology Department or Hamilton Library.  I calculated how much coral tissue one fish will remove and how long it takes for those areas to regrow and thus a “minimum” amount of coral required to sustain one Exallias (but not counting all the other coral feeders).  I also found that while Exallias feeds extensively on Porites lobata, it does not seem to feed on P. evermanni nor does anything else.  I never took the time to examine that more closely to find out why P. evermanni seems to have some protection from some (all??) coral feeders.  Is it distasteful or noxious, or just too difficult to consume??  I have no idea, nor do I know for certain that my casual field observation is in fact real.  There were few ( zero ?) P. evermanni in my main study area in Hanauma Bay but there were some really large old colonies off Kahe, west Oahu at my other study site.
  + Look at paper attachments in his email
  + Will send exalias and C. ornatissimus scar pictures